

FIG. 1

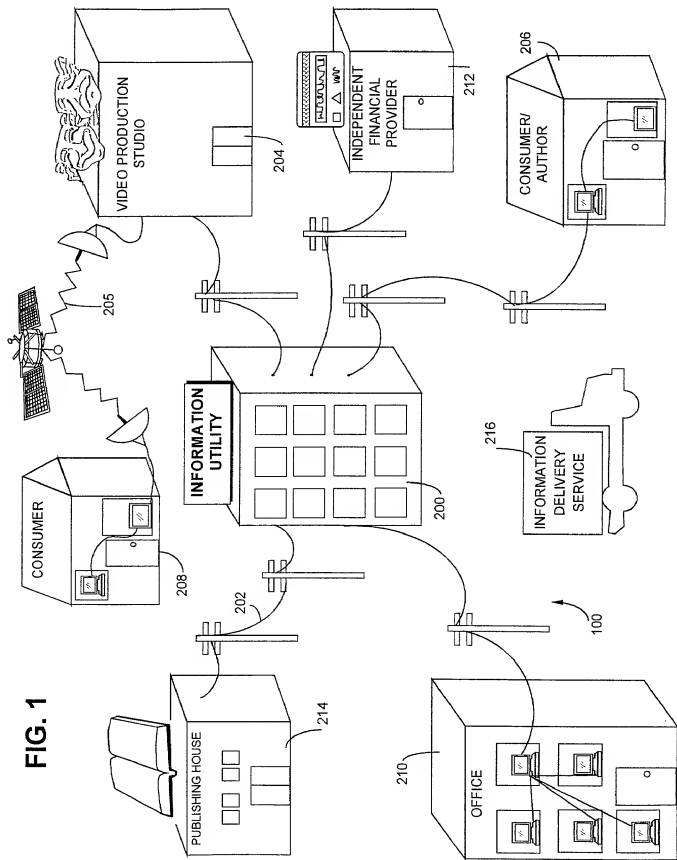


FIG. 1A

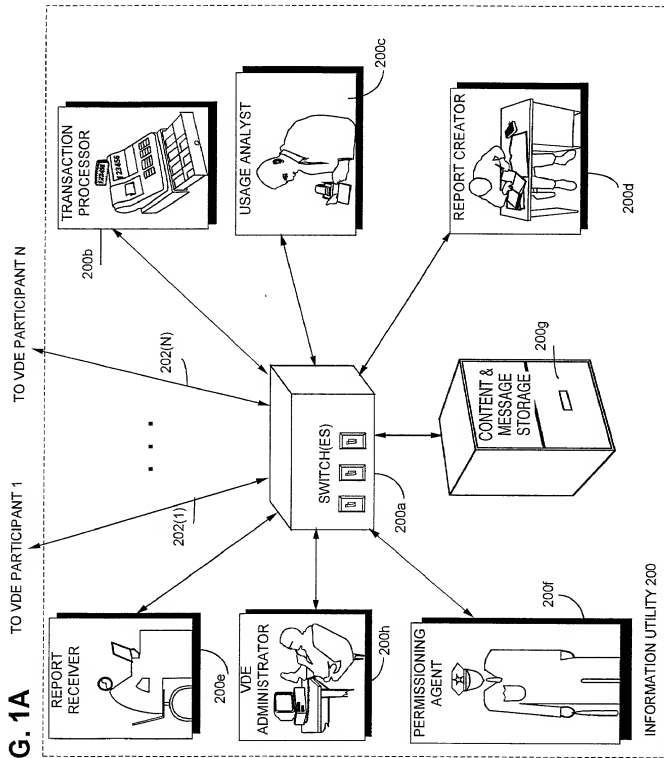


FIG. 2

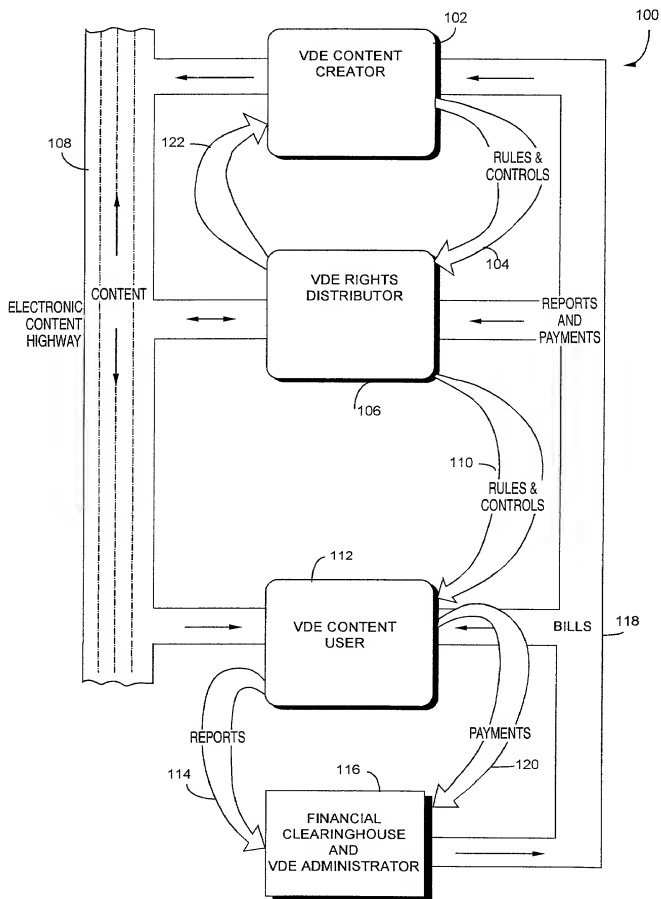
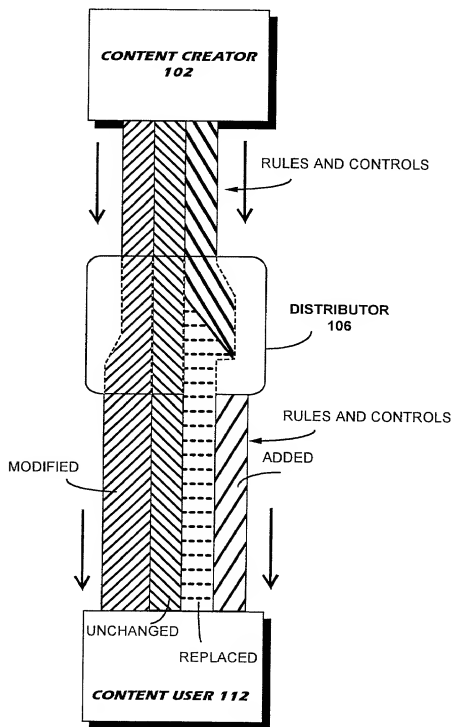
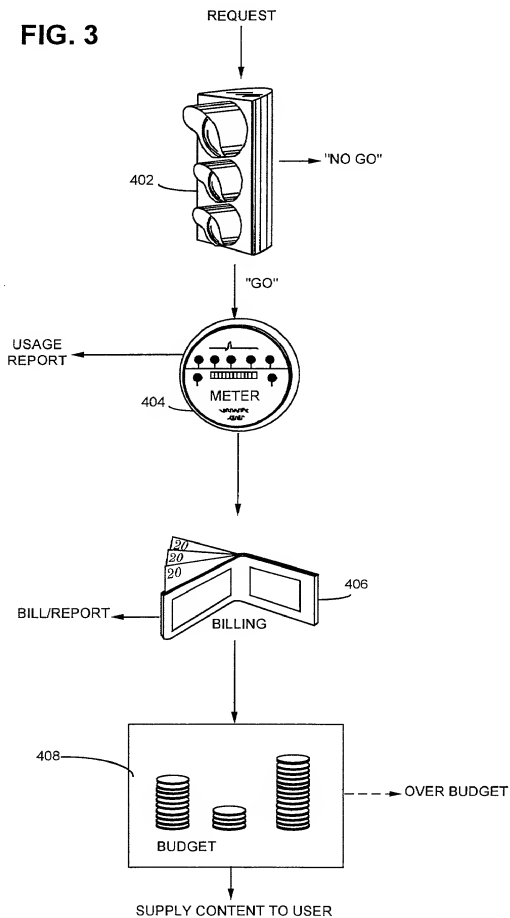


FIG. 2A



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**FIG. 3**



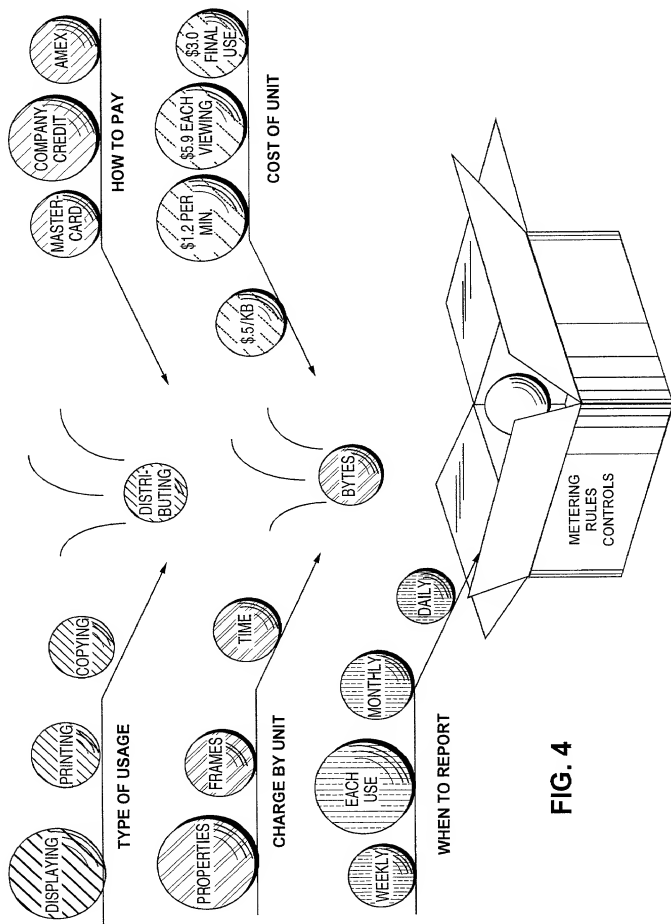
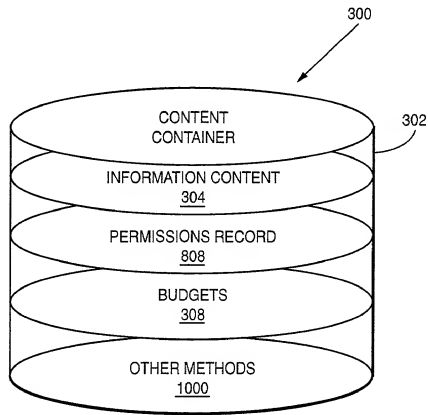
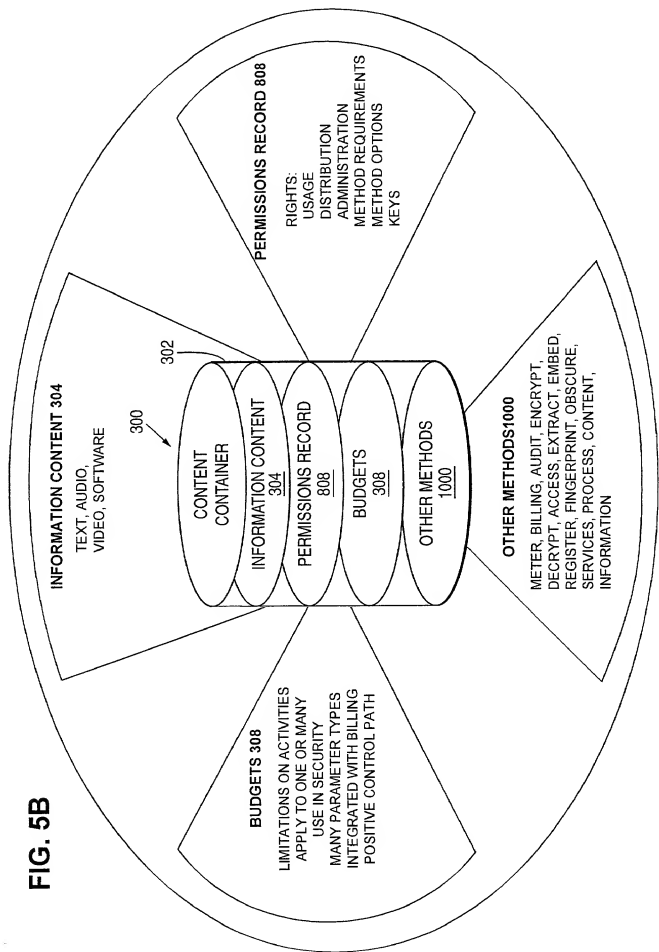


FIG. 4

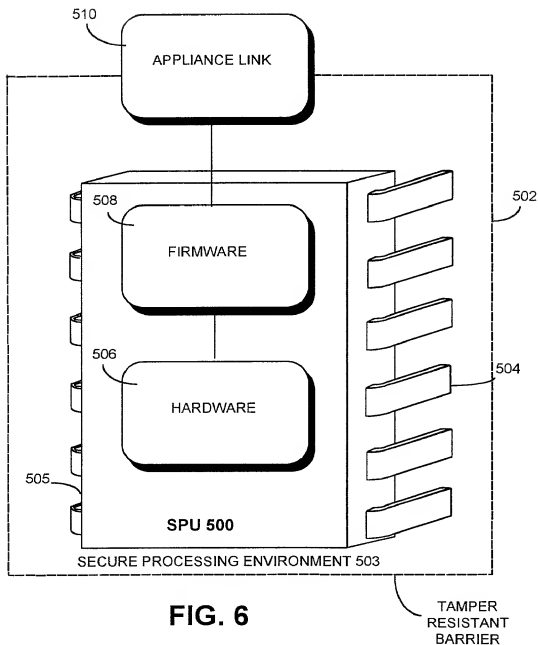
FIG. 5A



**FIG. 5B**

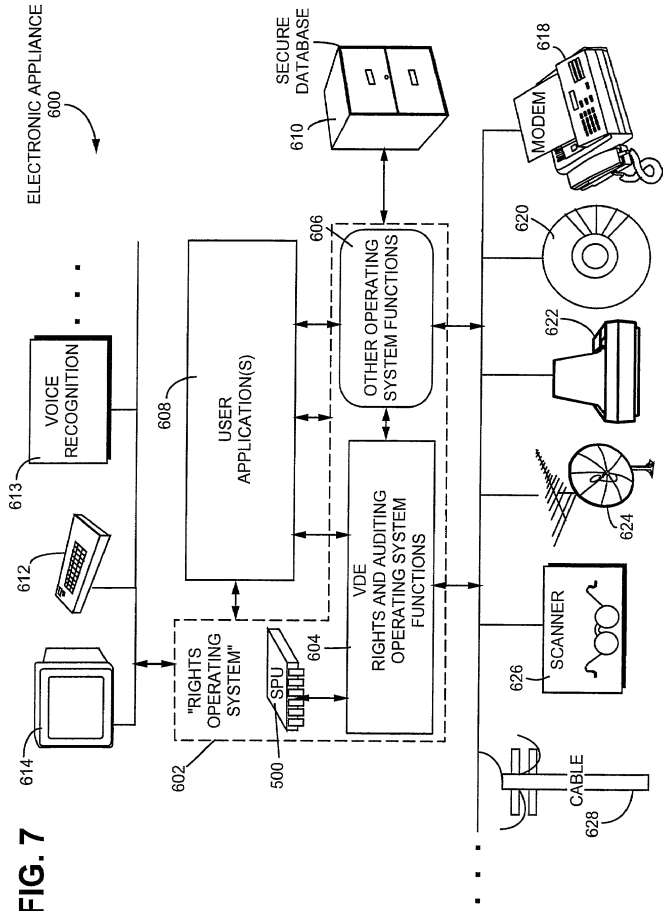




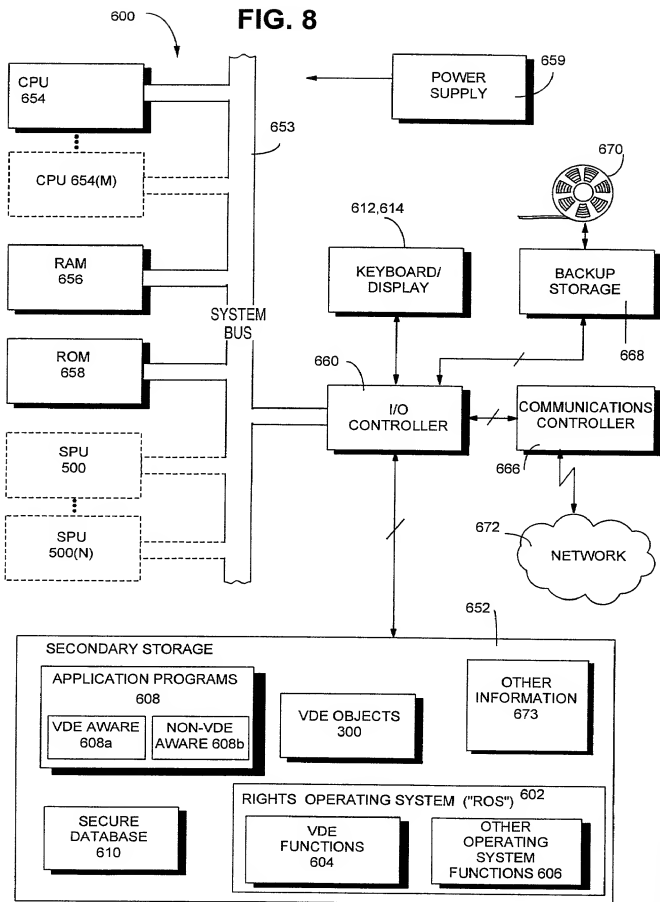


**FIG. 6**

FIG. 7



# FIG. 8



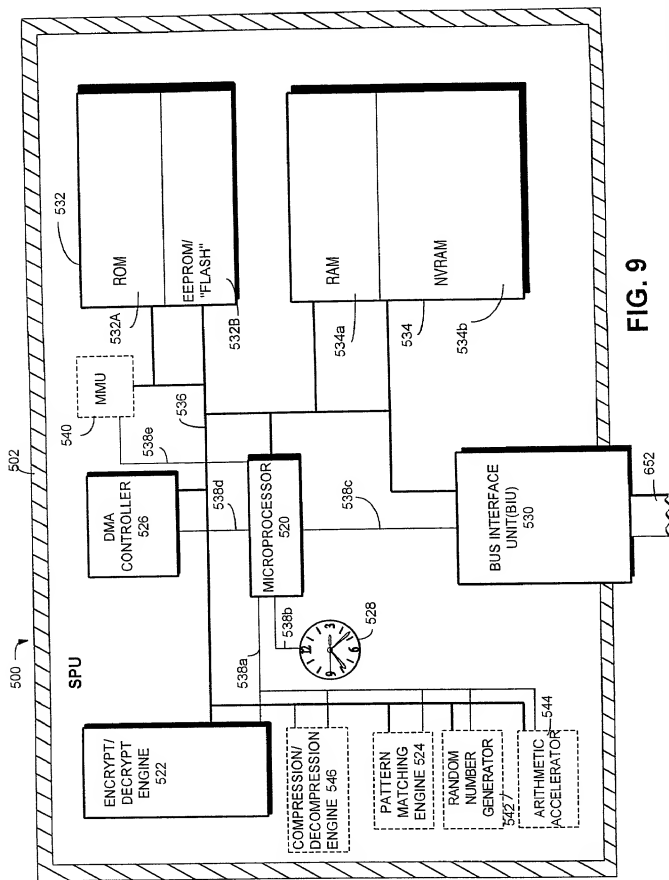


FIG. 9

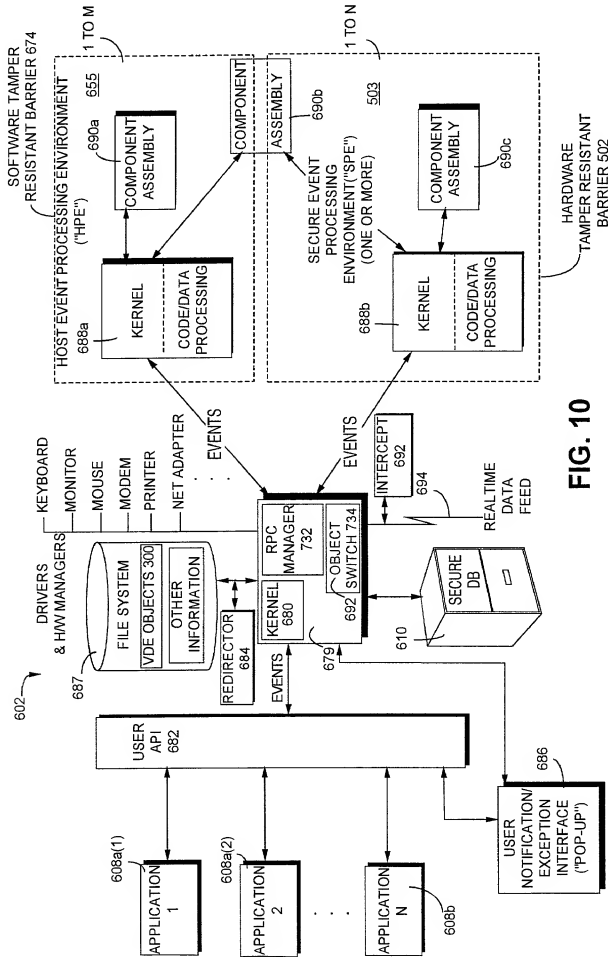


FIG. 10

FIG. 11C

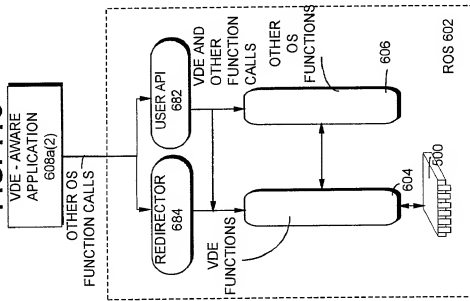


FIG. 11B

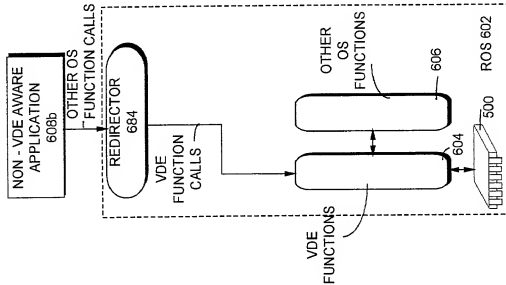
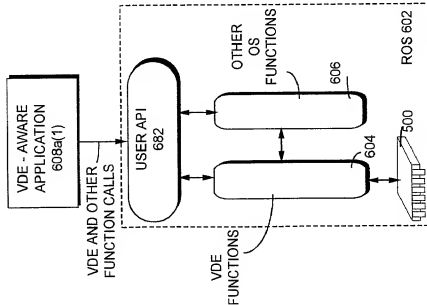


FIG. 11A



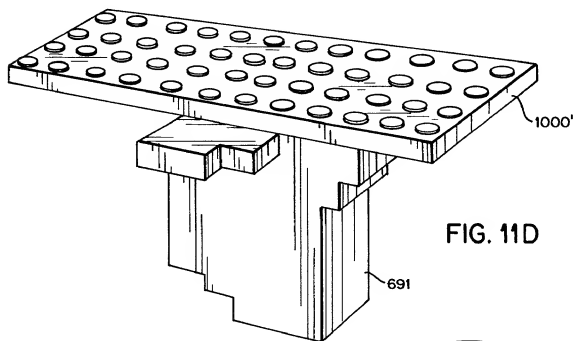


FIG. 11D

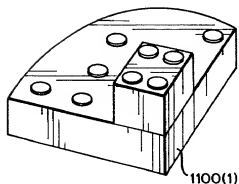


FIG. 11E

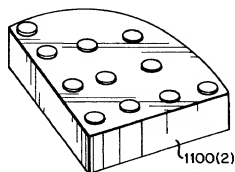


FIG. 11F

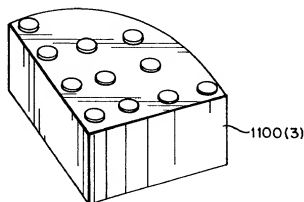


FIG. 11G

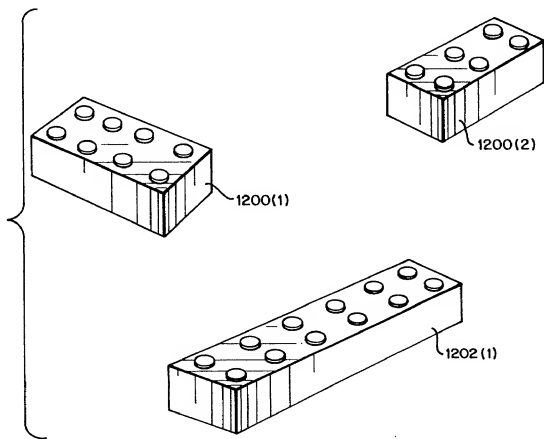


FIG. 11H



FIG. 11I

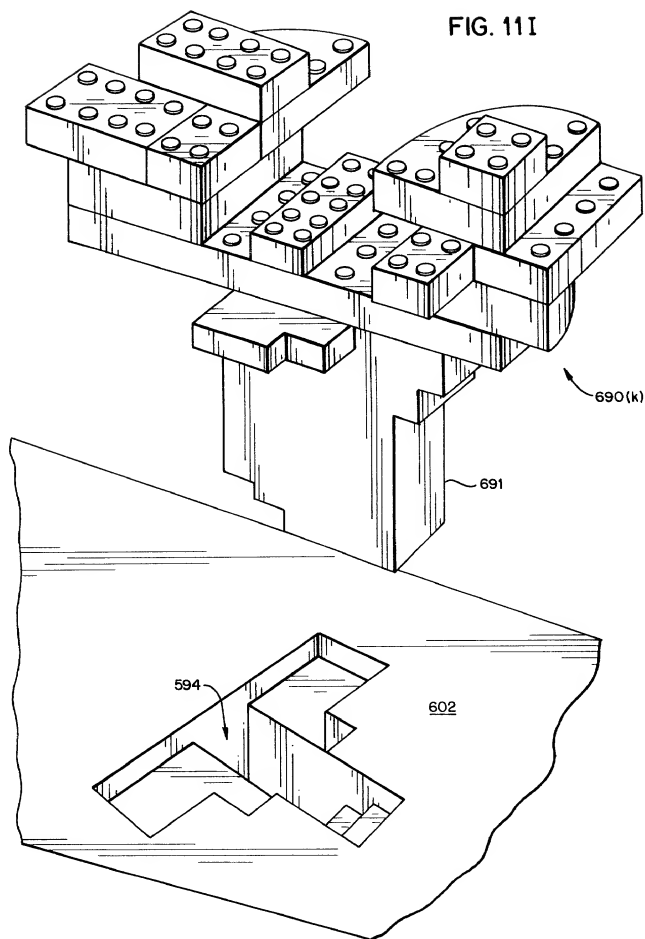


FIG. 11J

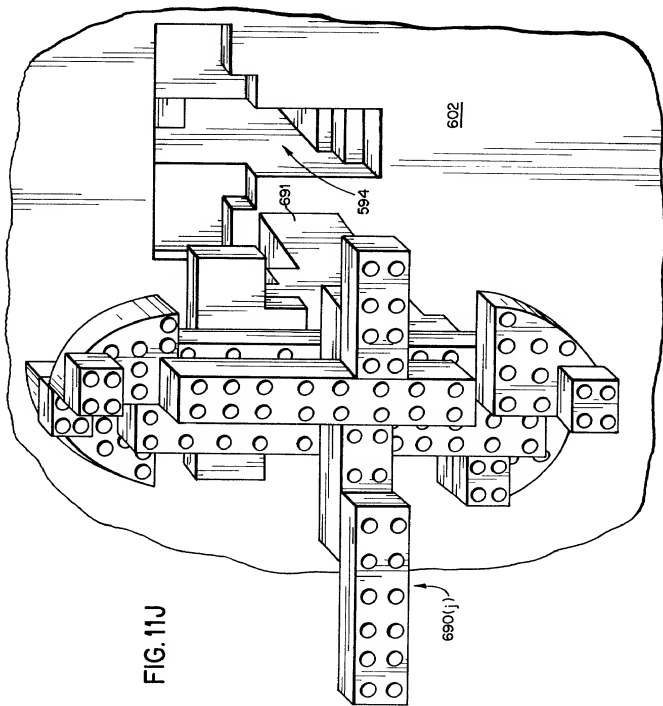


FIG. 12

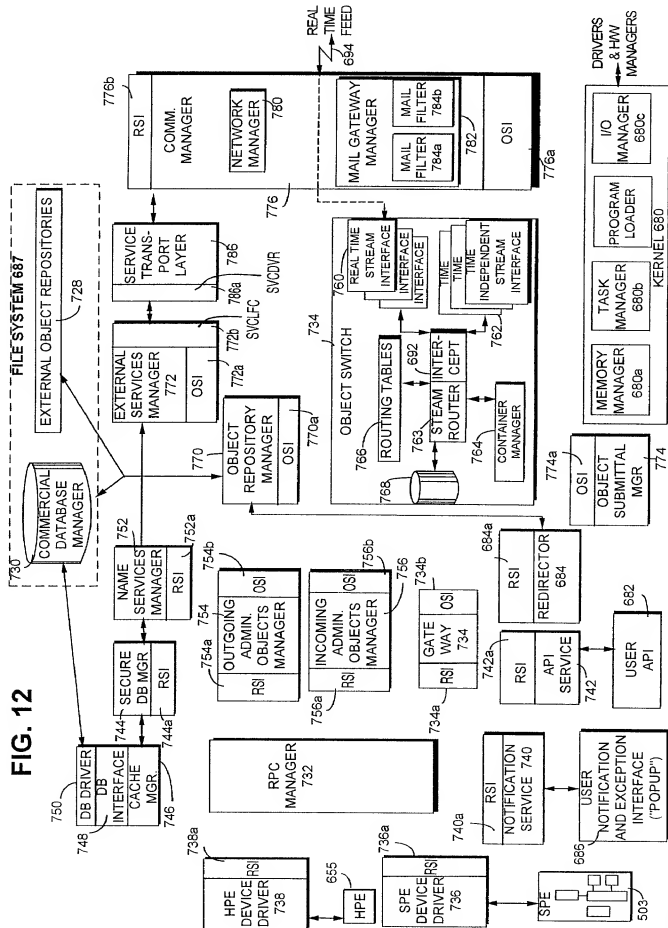


FIG. 12A

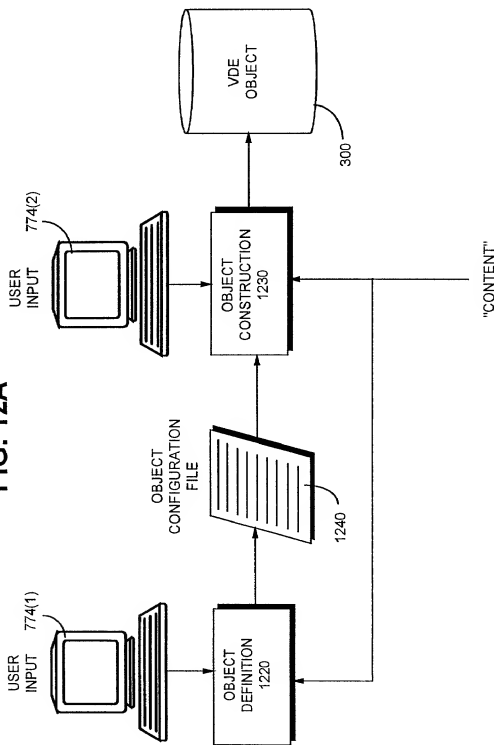
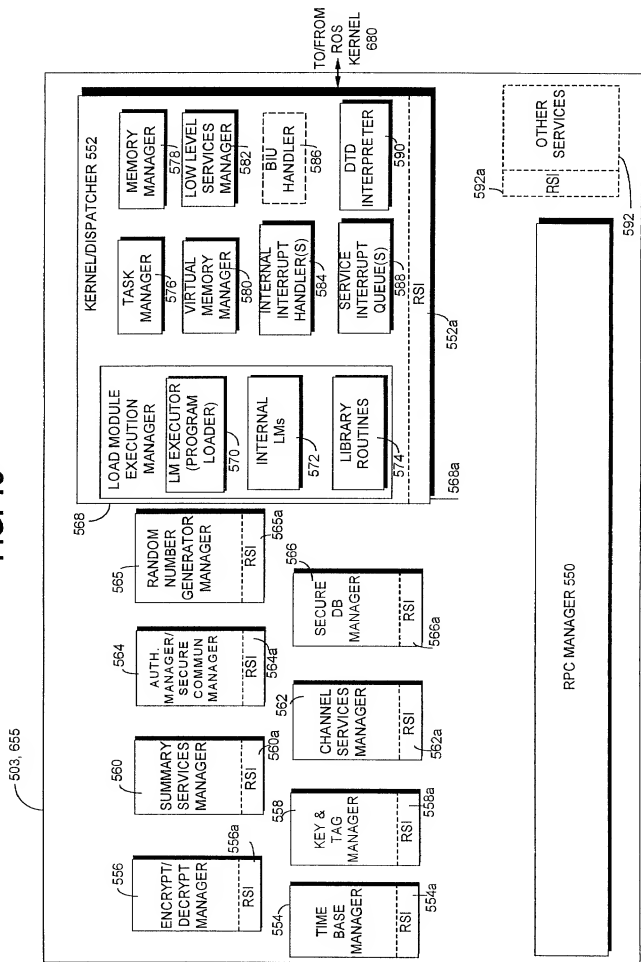


FIG. 13



# FIG. 14A

<b>DEVICE FIRM WIRE LOW LEVEL SERVICES 582</b>	<b>TIME BASE MANAGER 554</b>
INITIALIZATION	<b>ENCRYPTION/DECRYPTION MANAGER 556</b>
POST	PK
DOWNLOAD CHALLENGE/RESPONSE AND AUTHENTICATION	BULK
RECOVERY	<b>KEY AND TAG MANAGER 558</b>
EEPROM/FLASH MEMORY MANAGER	KEY STORAGE IN EEPROM
<b>KERNEL/DISPATCHER 552</b>	KEY LOCATOR
INITIALIZATION	KEY GENERATOR
TASK MANAGER 576 (SLEEP/AWAKE/CONTEXT SWAP)	CONVOLUTION ALGORITHM
INTERRUPT HANDLER 584 (TIMER/BIU/POWER FAIL/WATCHDOG TIMER/ENCRYPTION COMPLETED)	<b>SUMMARY SERVICES MANAGER 560</b>
BIU HANDLER 586	EVENT SUMMARIES
<b>MEMORY MANAGER 578</b>	BUDGET SUMMARIES
INITIALIZATION (SETTING MMU TABLES)	DISTRIBUTER SUMMARY SERVICES
ALLOCATE	<b>CHANNEL SERVICES MANAGER 562</b>
DELLOCATE	CHANNEL HEADERS
<b>VIRTUAL MEMORY MANAGER 580</b>	CHANNEL DETAILS
SWAP BLOCK PAGING	<b>LOAD MODULE EXECUTION SERVICES 568</b>
EXTERNAL MODULE PAGING	<b>AUTHENTICATION MANAGER/SECURE COMMUNICATION MANAGER 564</b>
MEMORY COMPRESS	<b>DATABASE MANAGER 566</b>
<b>RPC AND TABLES 550</b>	MANAGEMENT FILE SUPPORT
INITIALIZATION	TRANSACTION AND SEQUENCE NUMBER SUPPORT
MESSAGING CODE /SERVICES MANAGER	SRN/ HASH
SEND/RECEIVE	<b>DTD INTERPRETER 590</b>
STATUS	<b>LIBRARY ROUTINES 574</b>
RPC DISPATCH TABLE	I/O CALLS (STRING SEARCH ETC.)
RPC SERVICE TABLE	MISC. ITEMS THAT ARE PROBABLY LIBRARY ROUTINES
	TAG CHECKING, MD5, CRC'S
	<b>INTERNAL LM'S 572 FOR BASIC METHODS</b>
	METER LOAD MODULE(S)
	BILLING LOAD MODULE(S)
	BUDGET LOAD MODULE(S)
	AUDIT LOAD MODULE(S)
	READ OBJECT LOAD MODULE(S)
	WRITE OBJECT LOAD MODULE(S)
	OPEN OBJECT LOAD MODULE(S)
	CLOSE OBJECT LOAD MODULE(S)

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**FIG. 14B**

PUBLIC KEY AND PRIVATE KEY, SYSTEM ID, AUTHENTICATION CERTIFICATE,VDE SYSTEM PUBLIC KEY, PRIVATE DES KEY
TOP LEVEL KEYS FOR OBJECTS
TOP LEVEL BUDGET INFO
METER SUMMATION VALUES
KEY RECORDS FOR BUDGET RECORDS, AUDIT RECORDS, STATIC MANAGEMENT RECORDS, UPDATED MANAGEMENT RECORDS, ETC.
⋮
DEVICE DATA TABLE
SITE ID
TIME
ALARMS
TRANSACTION/SEQUENCE #S
MISCELLANEOUS
MEMORY MAP
MAP METERS
LM/UDT TABLE
TASK MANAGER 576
CHANNEL(S)
SUMMARY SERVICES 560
SECURE DATABASE TAGS
SRN ENTRIES
HASH ENTRIES

**FIG. 14C**

<b>STACK</b>	
•	
<b>CHANNEL SWAP BLOCK</b>	CHANNEL LM
	CHANNEL HEADER & D1
<b>CONTROL SWAP BLOCK</b>	CONTROL LM
	CONTROL D1
	COMMIT LM
	COMMIT D1, D2, D3
<b>EVENT SWAP BLOCK</b>	EVENT LM
	MAP TABLE (SINGLE) D1
<b>METER SWAP BLOCK</b>	METER LM
	METER UDE DELTA,DELTA'
	METER TRAIL LM
	METER TRAIL UDE DELTA,DELTA'
<b>BUDGET SWAP BLOCK</b>	METER LM
	METER UDE DELTA,DELTA'
	METER TRAIL LM
	METER TRAIL UDE DELTA,DELTA'
<b>BILLING SWAP BLOCK</b>	BILLING LM
	METER UDE
	BUDGET UDE
	BILLING TABLE UDE
	BILLING TRAIL LM
	BILLING TRAIL UDE DELTA'

•



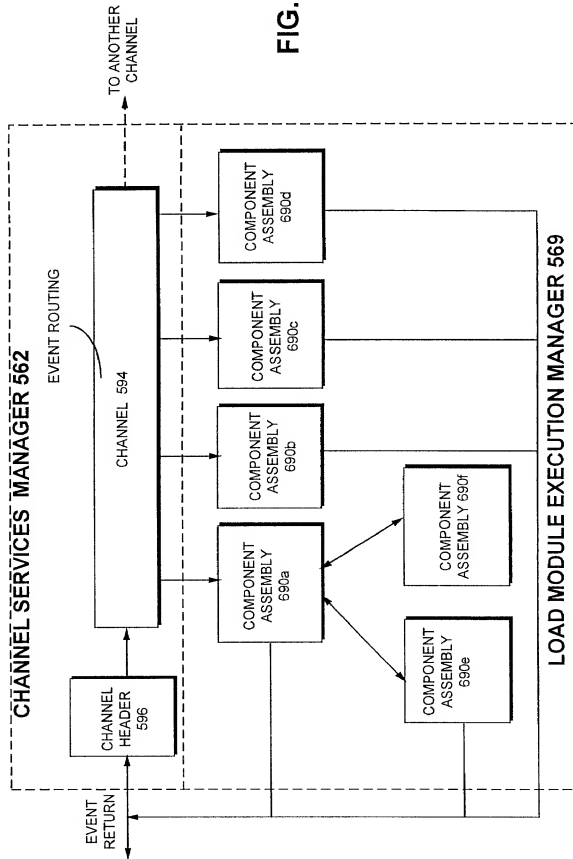
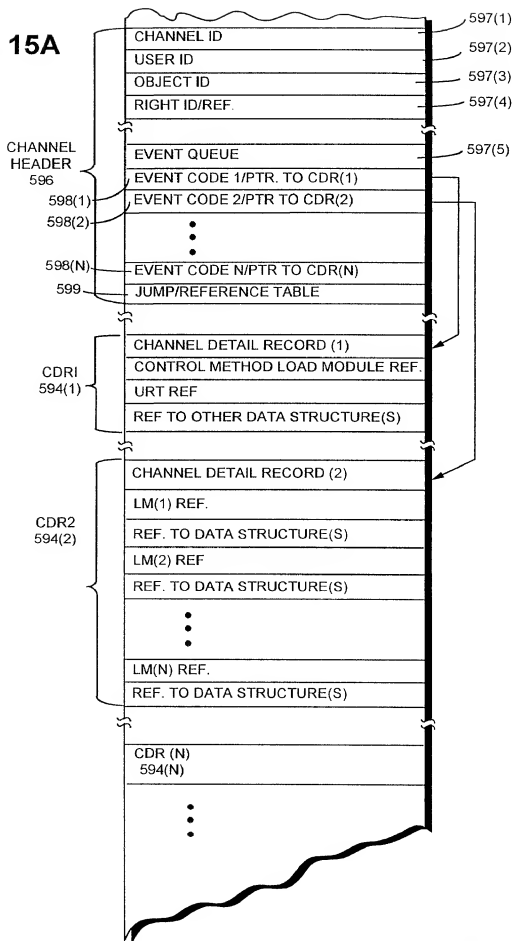


FIG. 15

**FIG. 15A**



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FIG. 15B

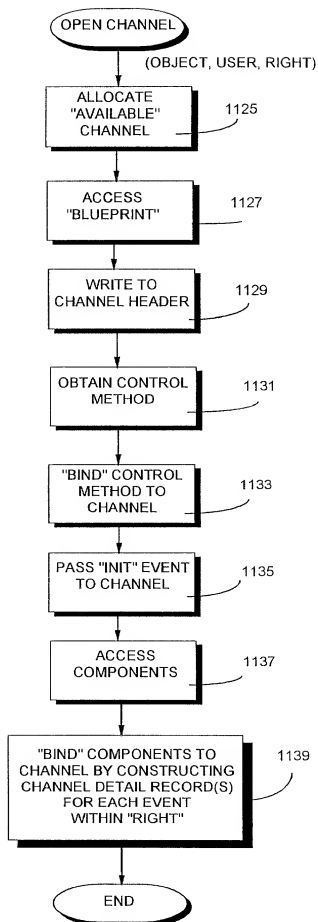
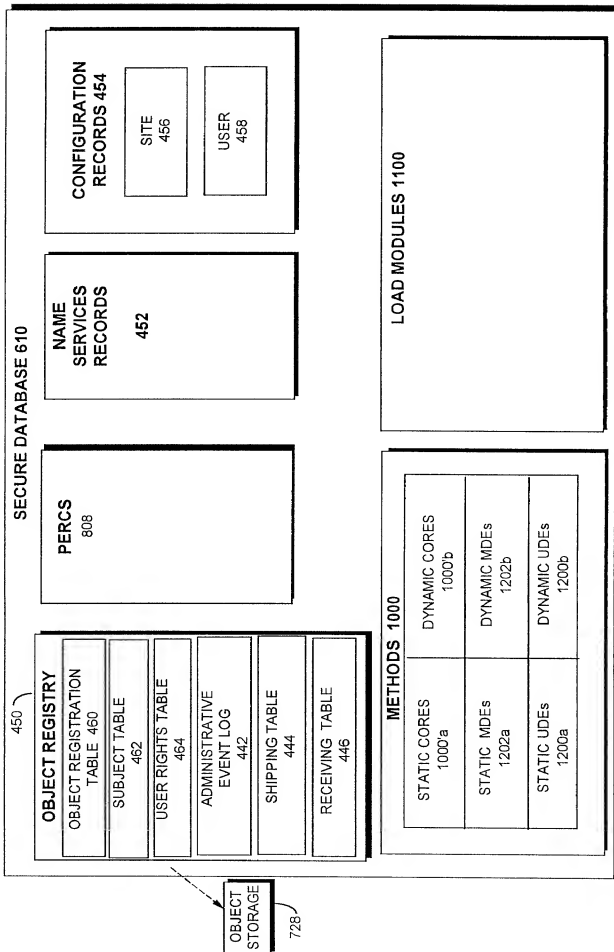


FIG. 16



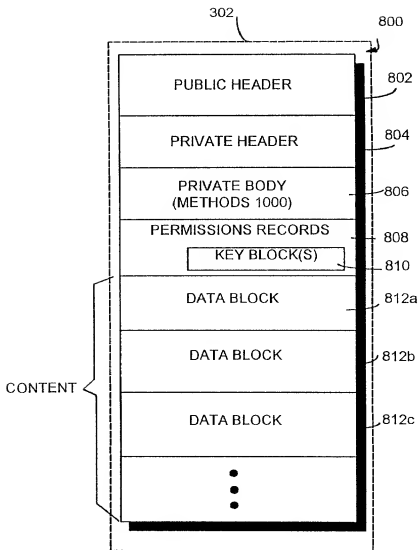
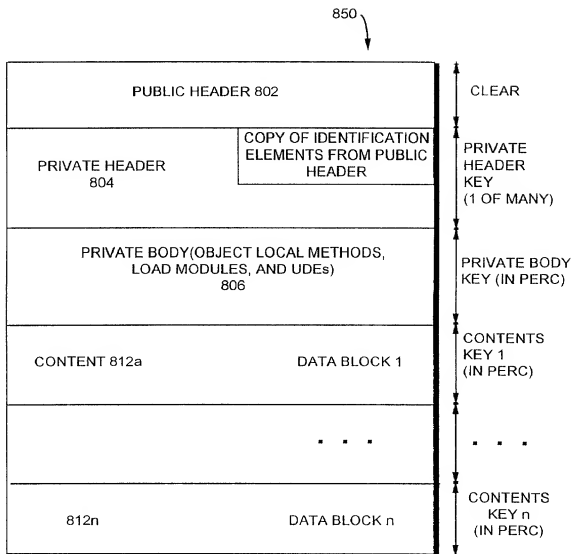


FIG. 17



**FIG. 18**

The diagram illustrates a data structure layout, likely for a file or memory segment, organized into several horizontal sections. A vertical arrow on the right side, labeled 860, indicates the flow or sequence of these sections.

- PUBLIC HEADER 802:** The top section, labeled "PUBLIC HEADER 802".
- PRIVATE HEADER 804:** The section below the public header, labeled "PRIVATE HEADER 804". It contains a "COPY OF IDENTIFICATION ELEMENTS FROM PUBLIC HEADER" and a "PERC" (Private Header Key) section, which is further labeled "KEY BLOCKS 810".
- PRIVATE BODY (OBJECT METHODS, LOAD MODULES, AND UDEs) 806:** The section below the private header, labeled "PRIVATE BODY (OBJECT METHODS, LOAD MODULES, AND UDEs) 806".
- CONTENT 812a:** The first content block, labeled "CONTENT 812a".
- DATA BLOCK 1:** The first data block, labeled "DATA BLOCK 1".
- Ellipsis:** A series of three dots "..." indicates that there are multiple content blocks and data blocks.
- CONTENT 812n:** The last content block, labeled "CONTENT 812n".
- DATA BLOCK n:** The last data block, labeled "DATA BLOCK n".

On the right side, a vertical arrow labeled 860 points downwards, indicating the sequence of the sections. The sections are labeled as follows:

- CLEAR:** The top section, labeled "CLEAR".
- PRIVATE HEADER KEY (1 OF MANY):** The section below the private header, labeled "PRIVATE HEADER KEY (1 OF MANY)".
- PRIVATE BODY KEY (IN PERC):** The section below the private body, labeled "PRIVATE BODY KEY (IN PERC)".
- CONTENTS KEY 1 (IN PERC):** The section below the first content block, labeled "CONTENTS KEY 1 (IN PERC)".
- CONTENTS KEY n (IN PERC):** The section below the last content block, labeled "CONTENTS KEY n (IN PERC)".

FIG. 19

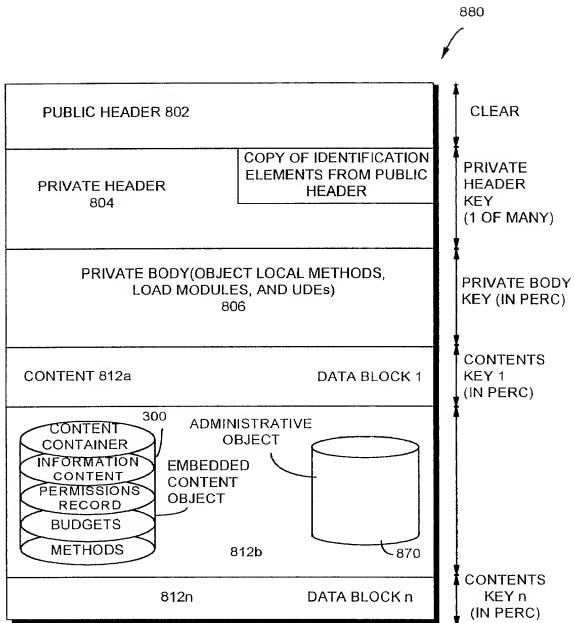


FIG. 20



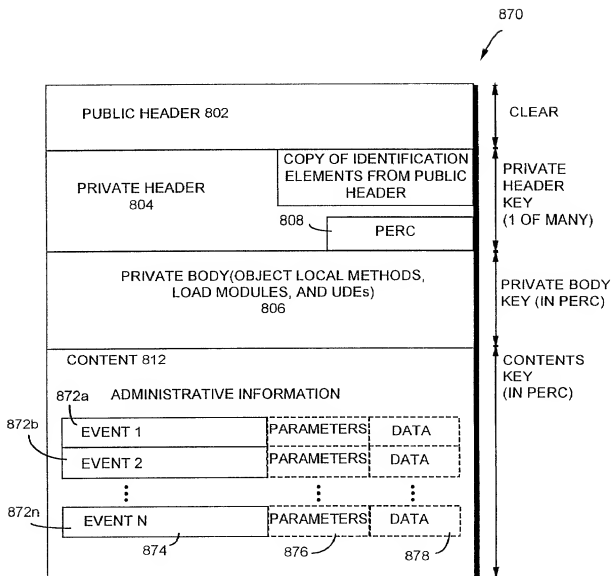
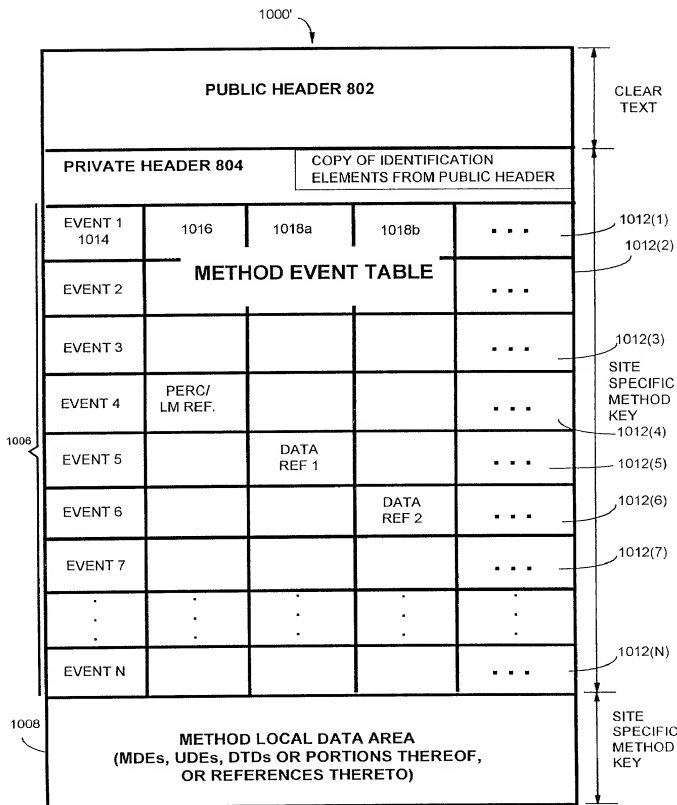


FIG. 21

# FIG. 22



# FIG. 23

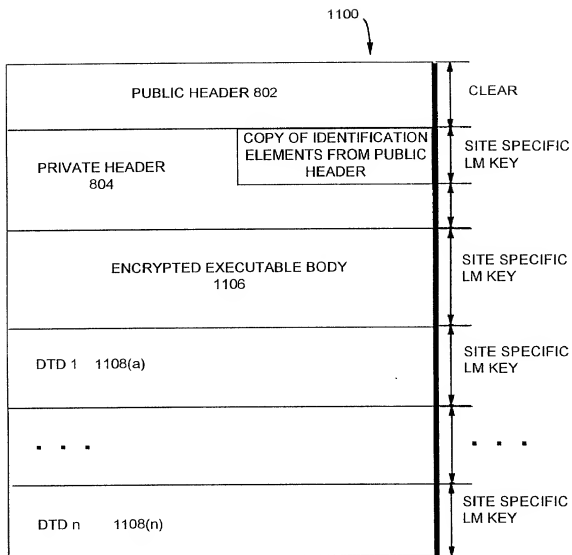


FIG. 24

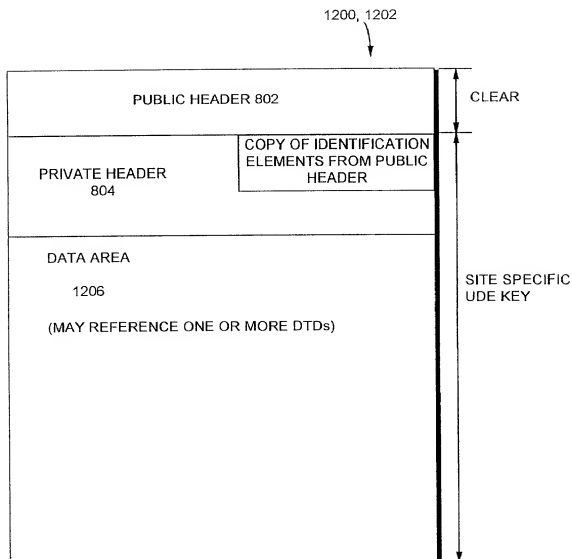


FIG. 25A

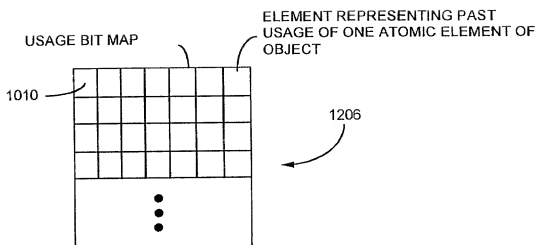


FIG. 25B

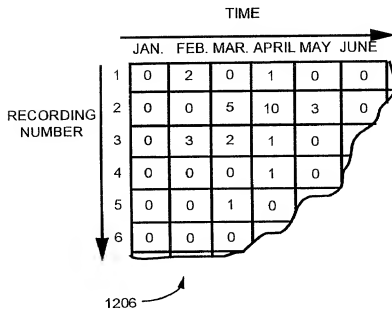
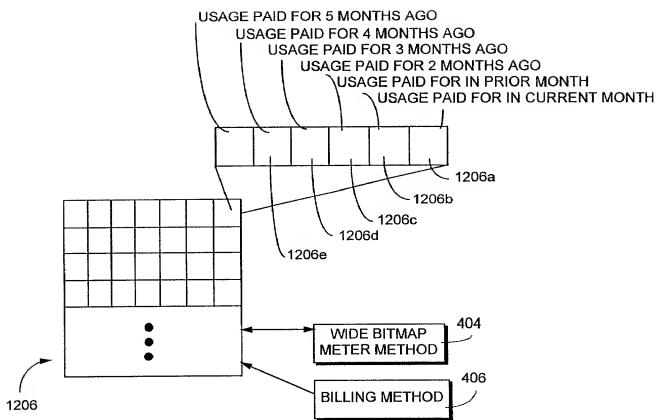
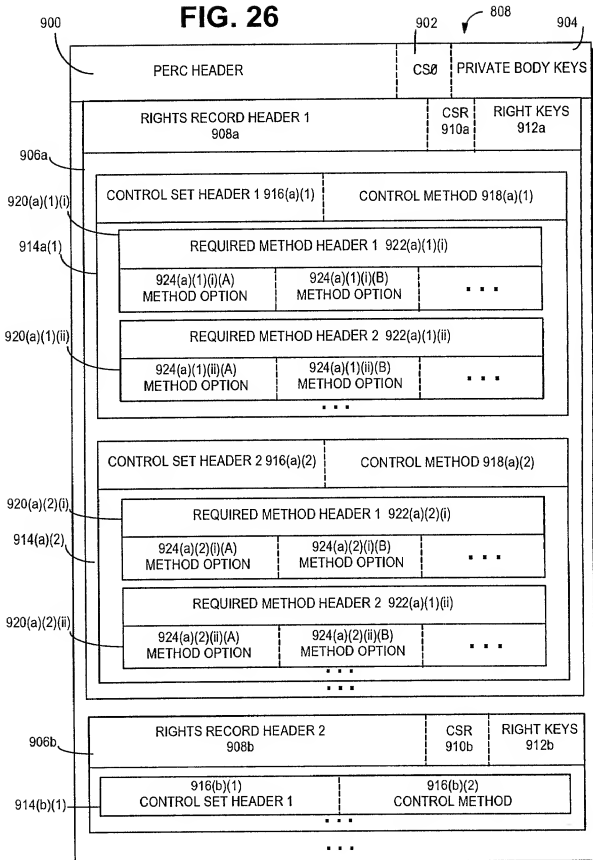


FIG. 25C



# FIG. 26



# FIG. 26A

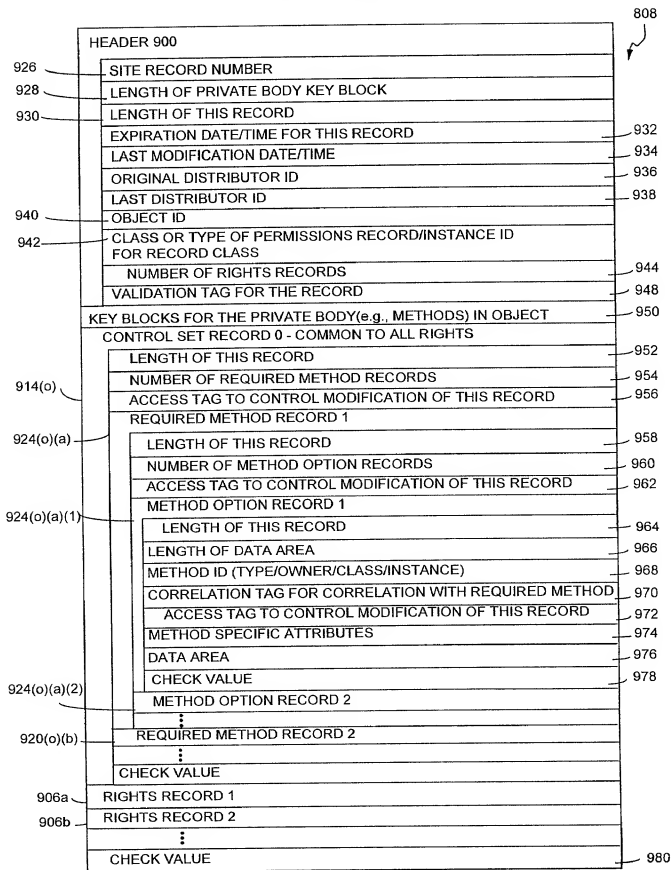
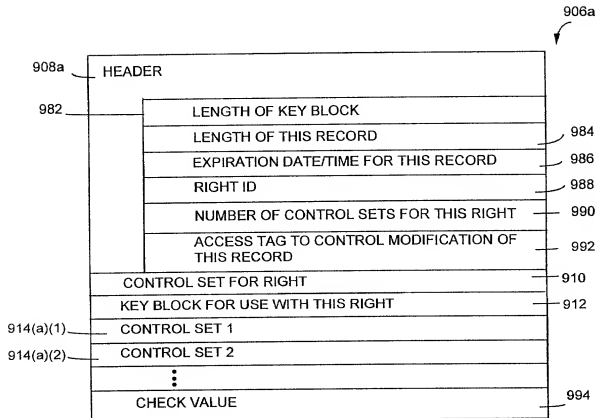
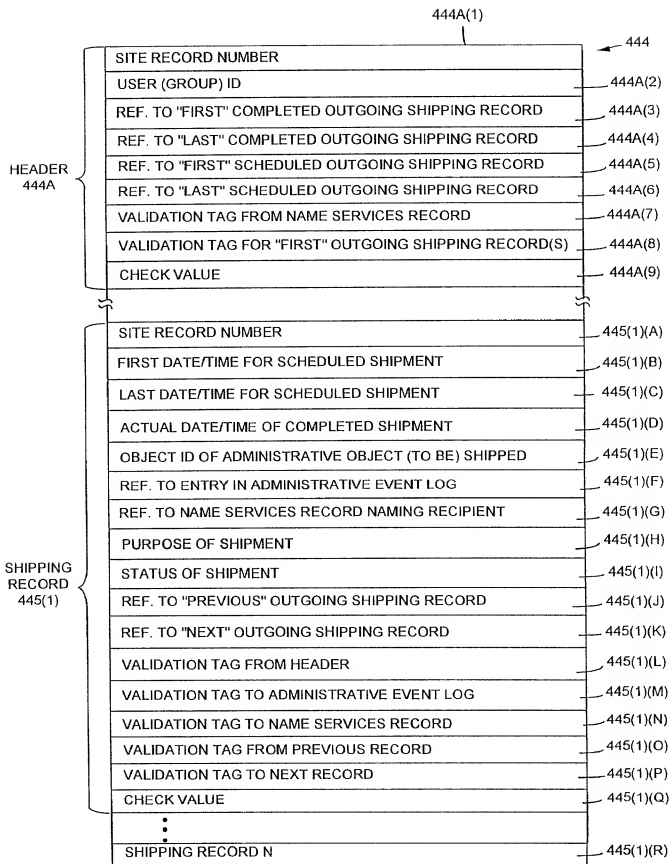




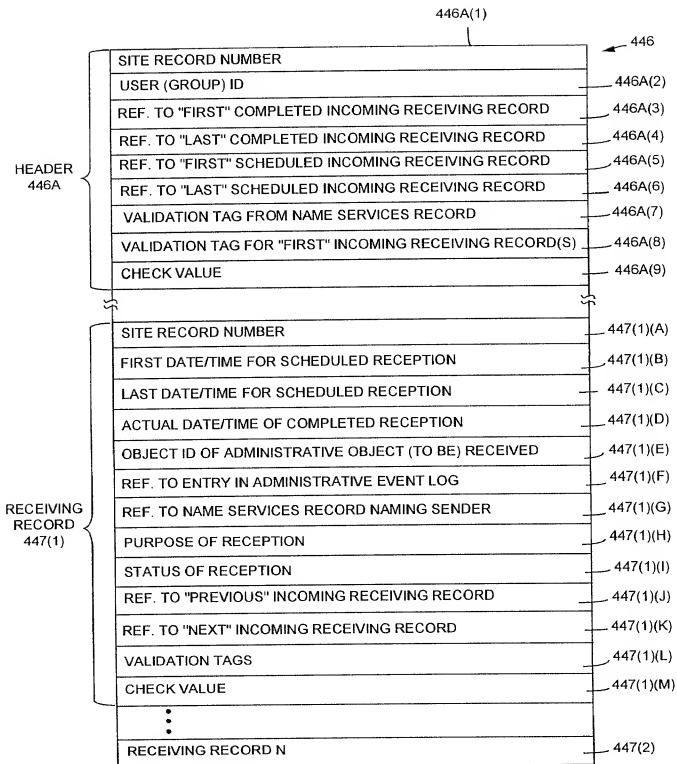
FIG. 26B



# FIG. 27



# FIG. 28



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FIG. 29

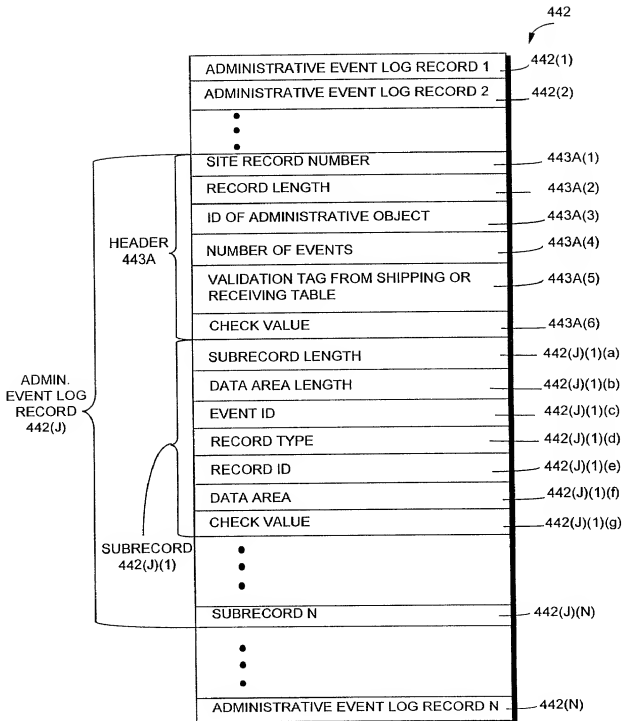
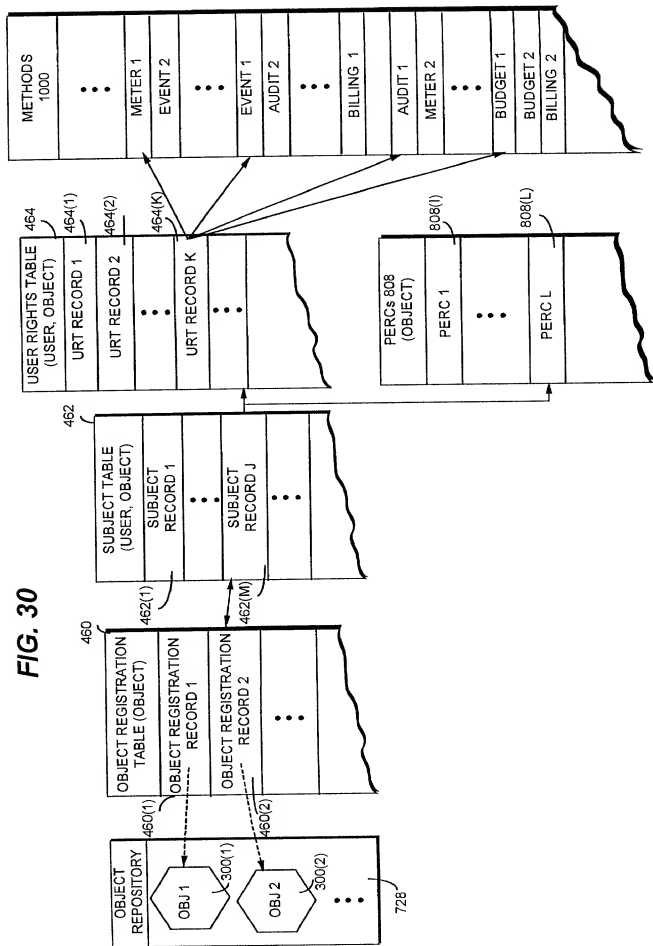
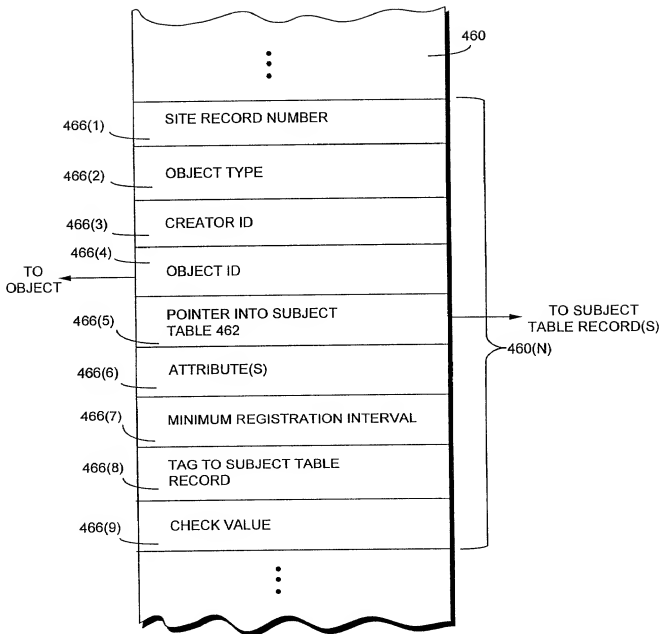


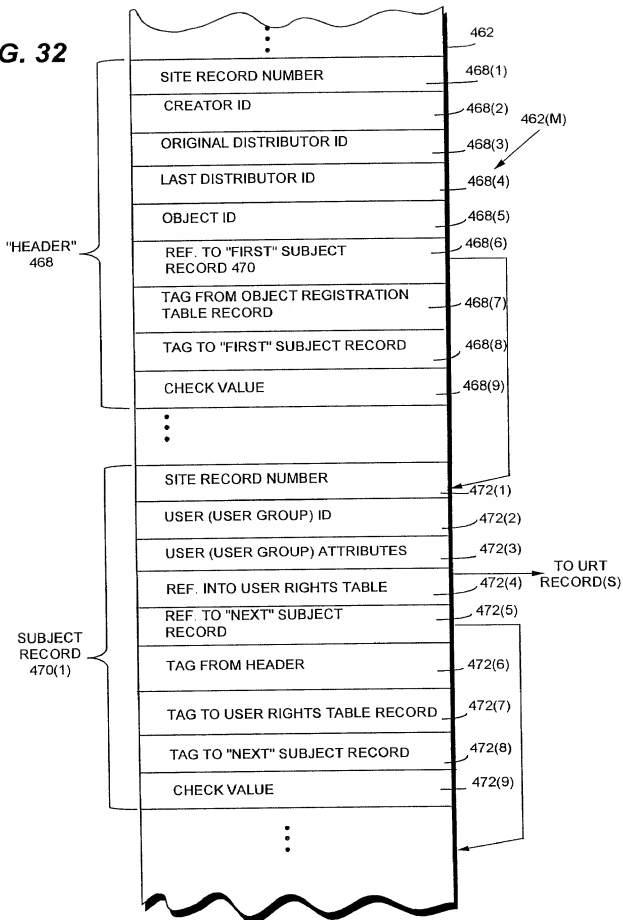
FIG. 30





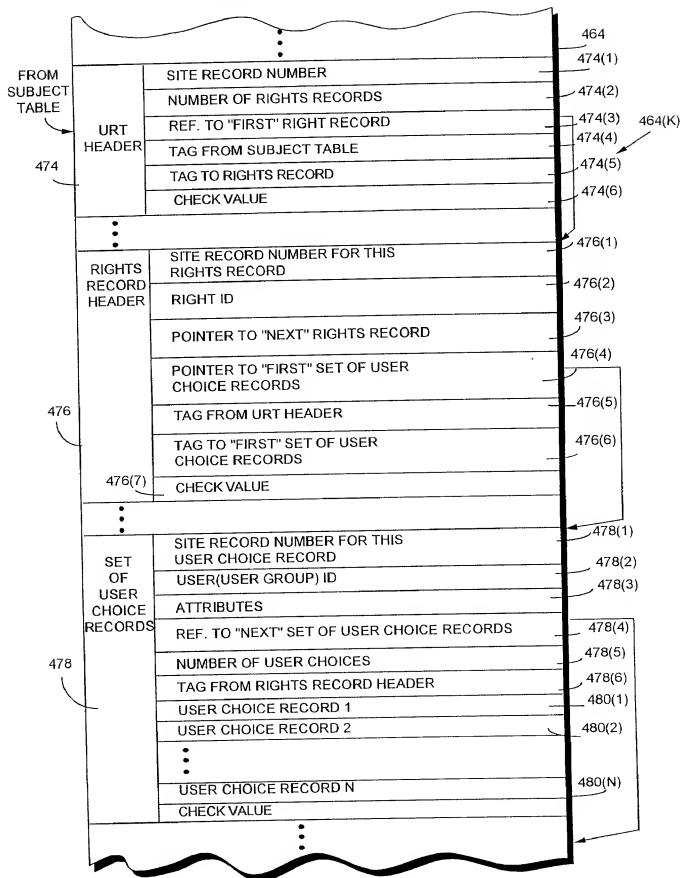
**FIG. 31**

**FIG. 32**



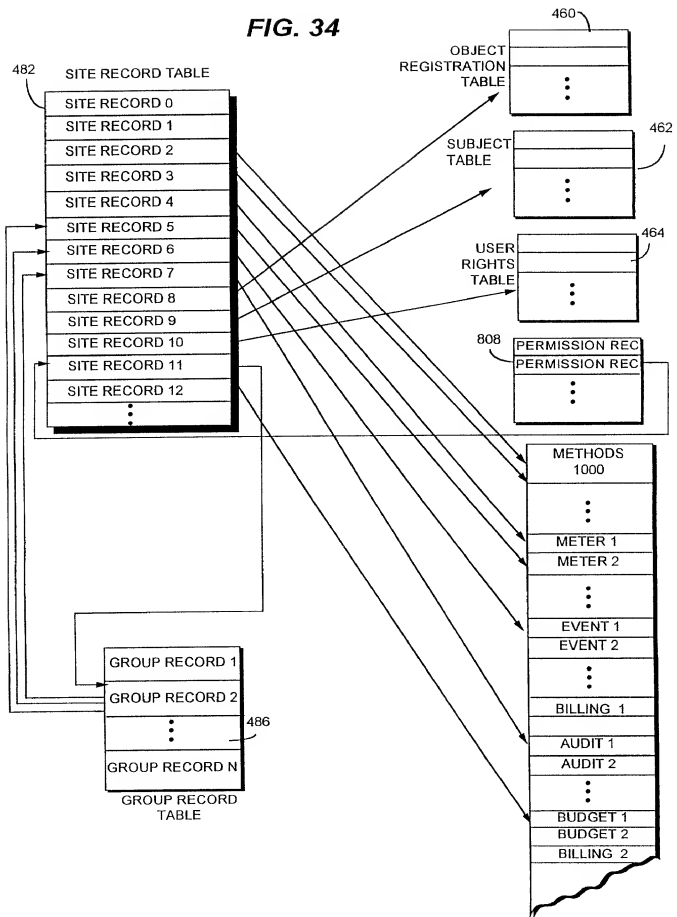
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FIG. 33



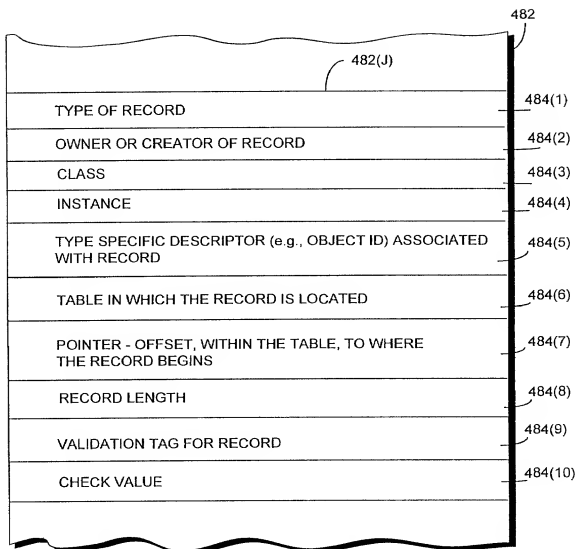


**FIG. 34**



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**FIG. 34A**



**FIG. 34B**

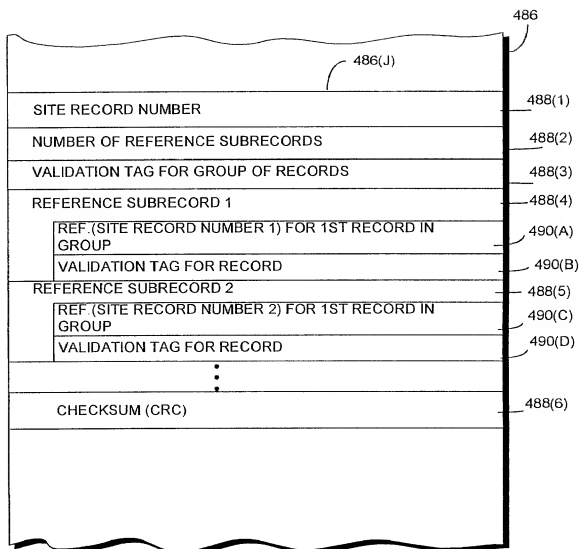


FIG. 35

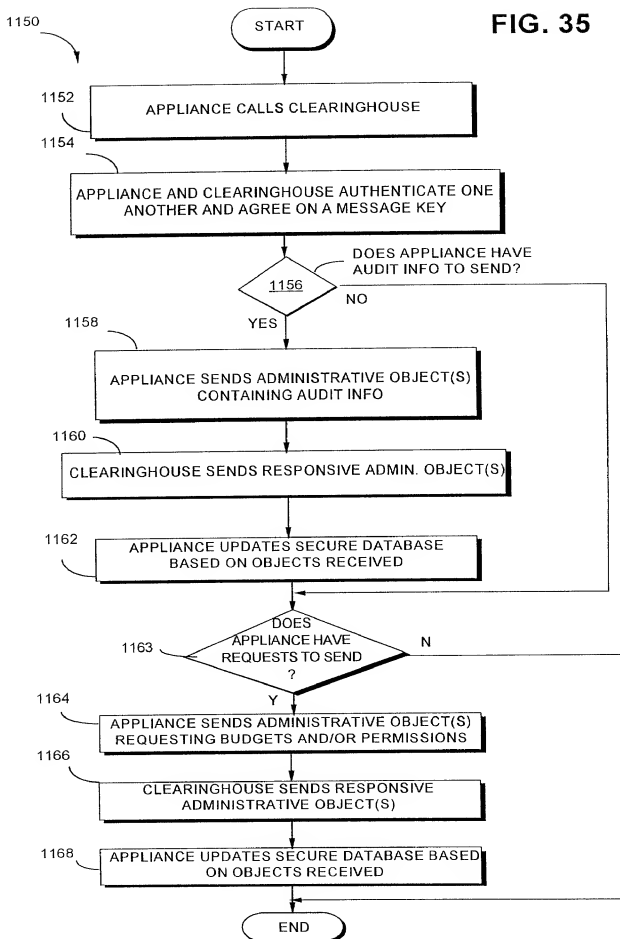


FIG. 36

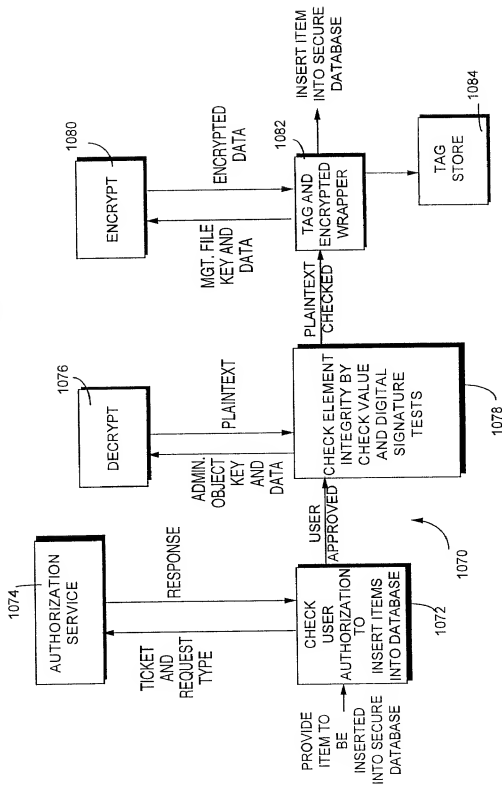


FIG. 37

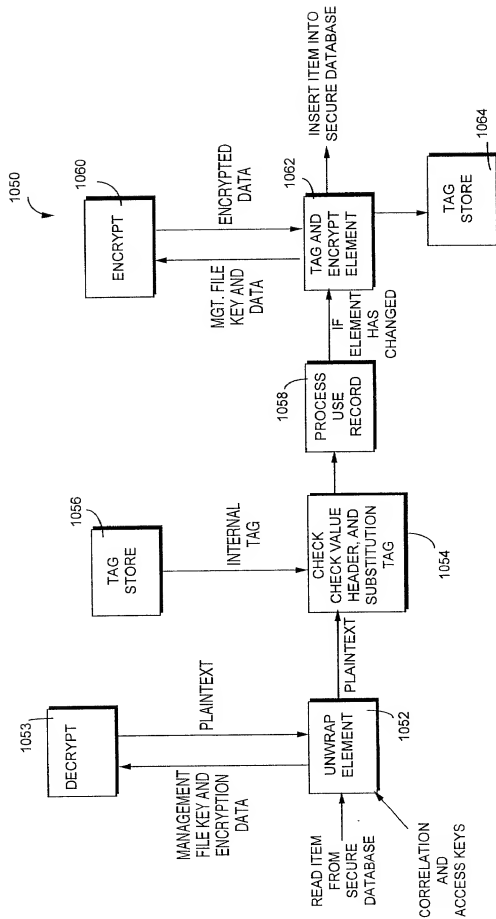
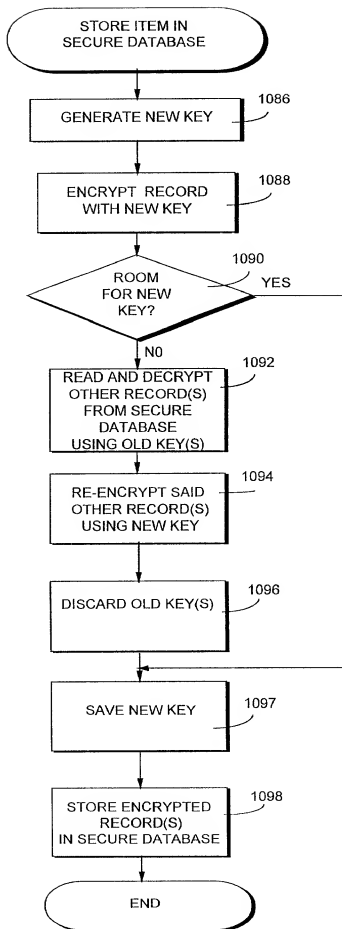


FIG. 38



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FIG. 39

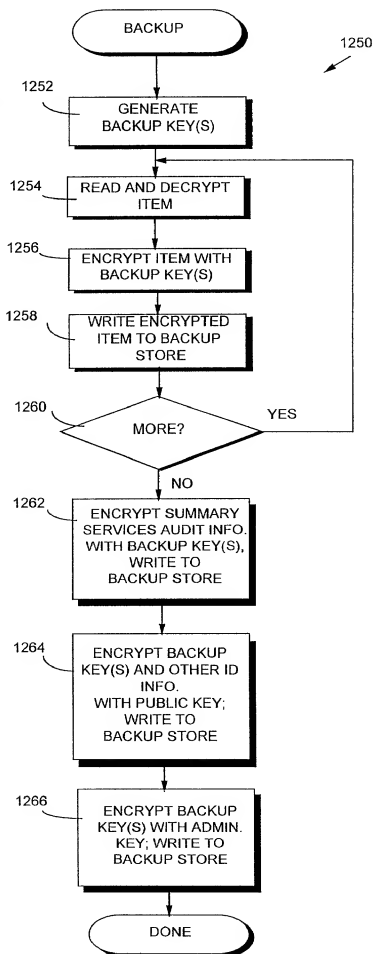
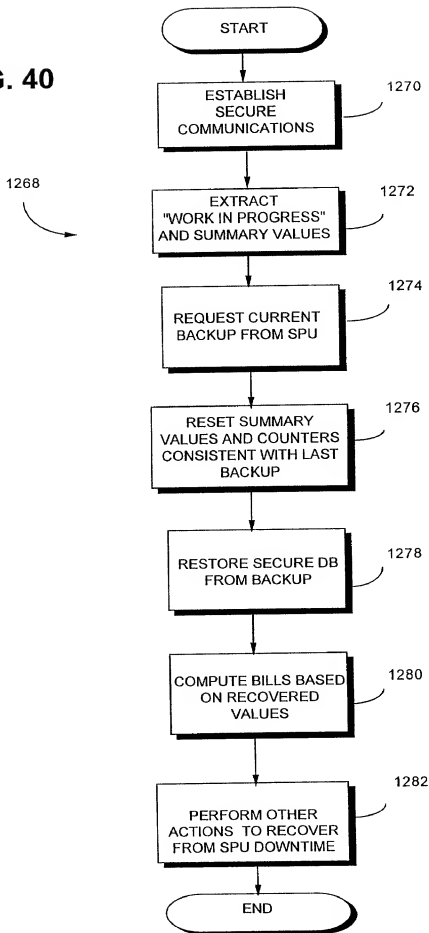




FIG. 40



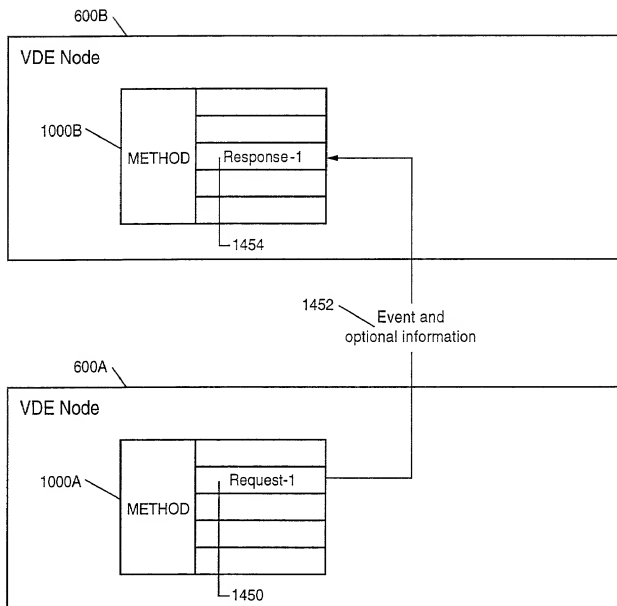


FIG. 41a

[illegible]

**FIG. 41b**

**FIG. 41c**

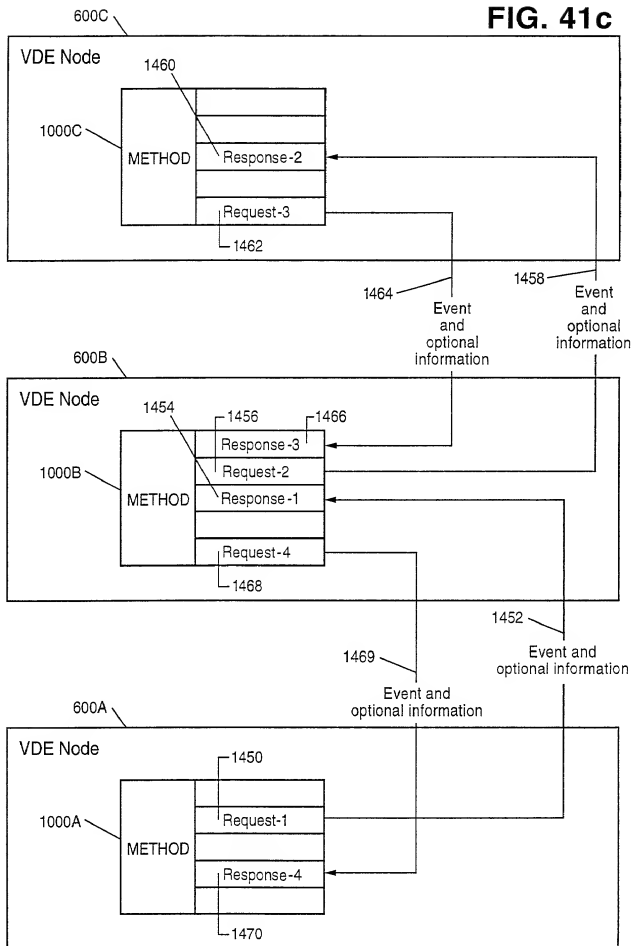
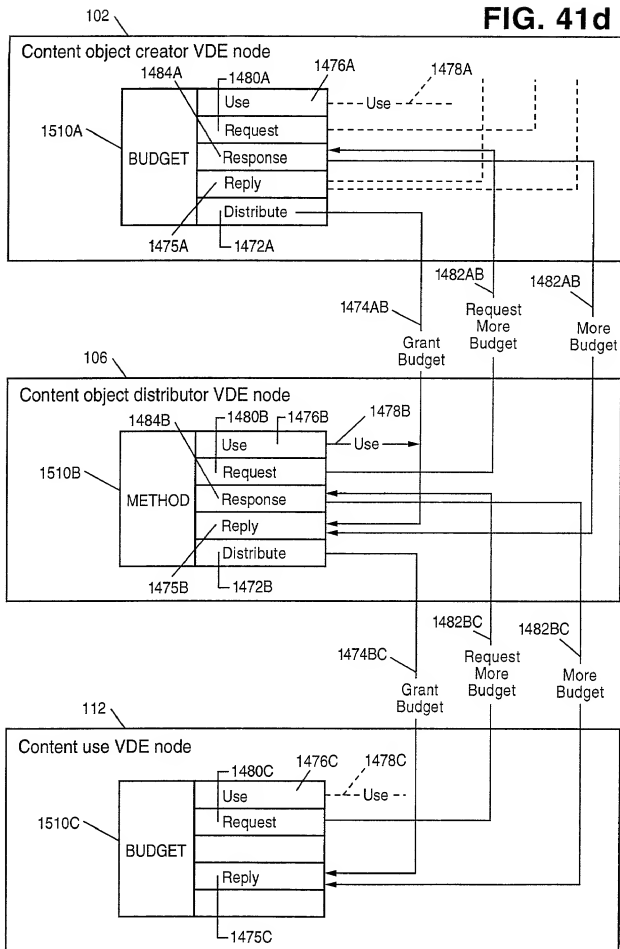
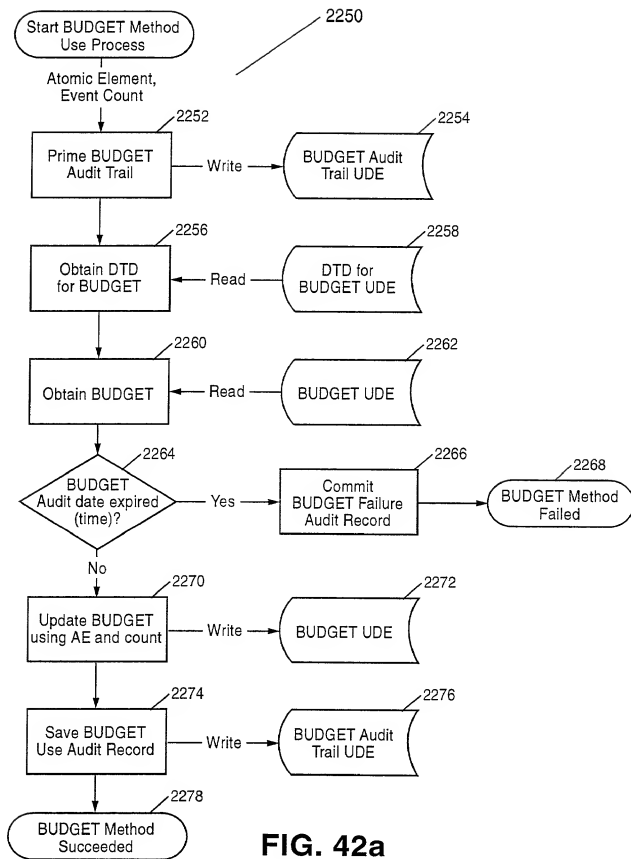


FIG. 41d





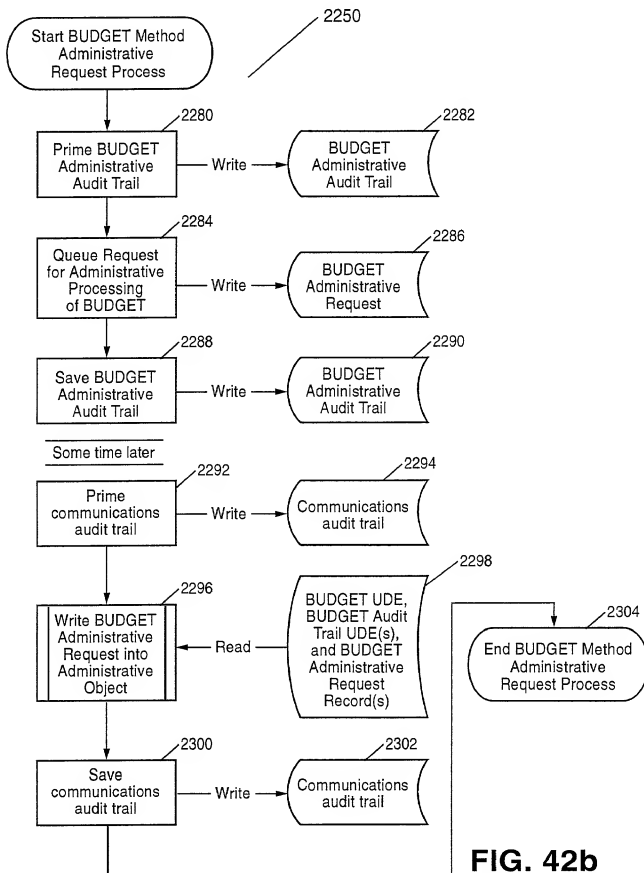


FIG. 42b

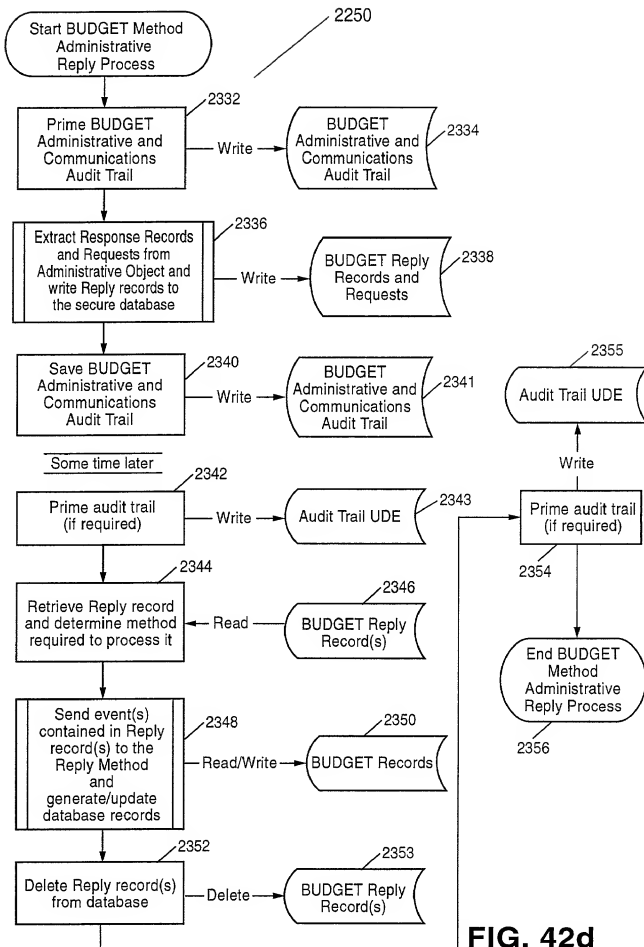
```

graph TD
    2250([Start BUDGET Method Administrative Response Process]) --> 2306[Prime BUDGET Communications and Response Audit Trail]
    2306 -- Write --> 2308[/Communications and Response Audit Trail/]
    2306 --> 2310[Unpack Admin. Object and retrieve BUDGET request(s), audit trail(s) and record(s)]
    2310 -- Write --> 2312[/BUDGET Administrative Request, Budget records, and audit information/]
    2310 --> 2314[Retrieve request and determine the response method to run to process the request]
    2314 -- Read --> 2316[/Administrative Request/]
    2314 --> 2318[Send event(s) contained in Request record(s) to the Response Method and generate Response records and Response request]
    2318 -- Read/Write --> 2320[/BUDGET Request and Response records/]
    2318 --> 2322[Write BUDGET Administrative Response records into Administrative Object]
    2322 -- Read --> 2324[/BUDGET UDE and BUDGET Administrative Response Record(s)/]
    2322 --> 2326[Save communications and response processing audit trail]
    2326 -- Write --> 2328[/Communications and response processing audit trail/]
    2326 --> 2330([End BUDGET Method Administrative Response Process])
  
```

**FIG. 42c**

**FIG. 42c**





**FIG. 42d**

FIG. 43a

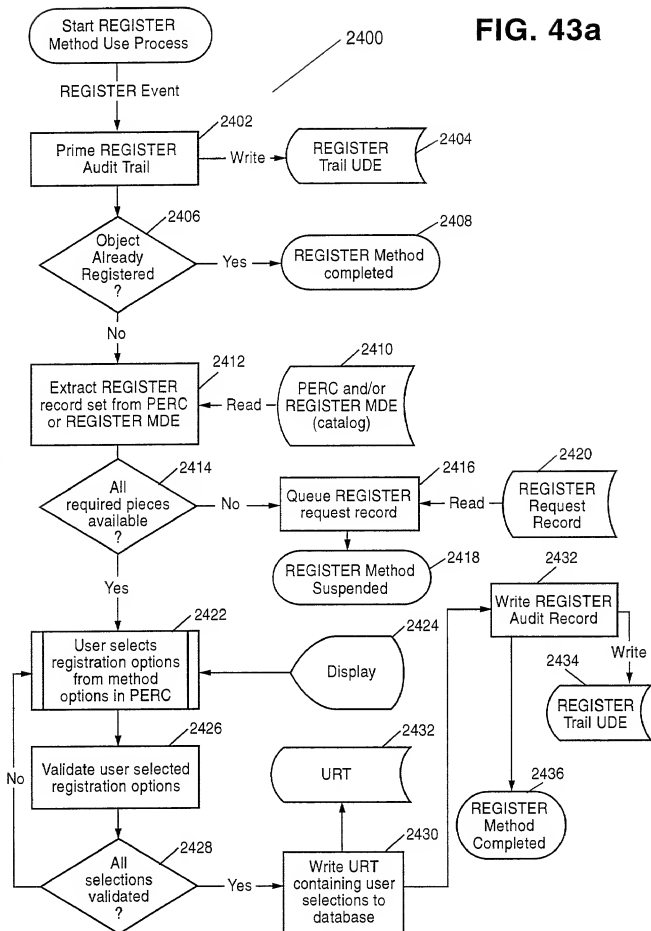
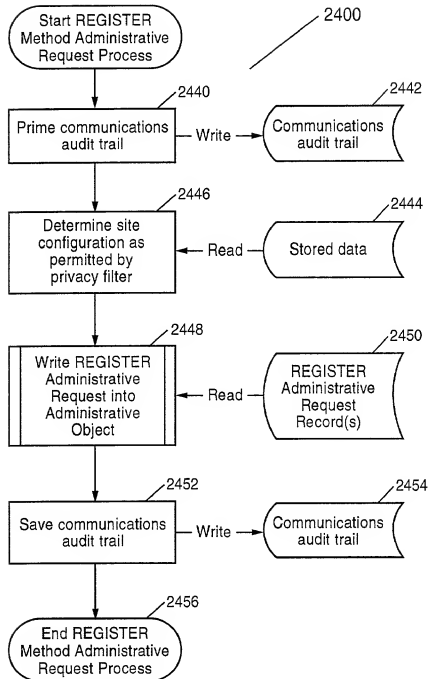
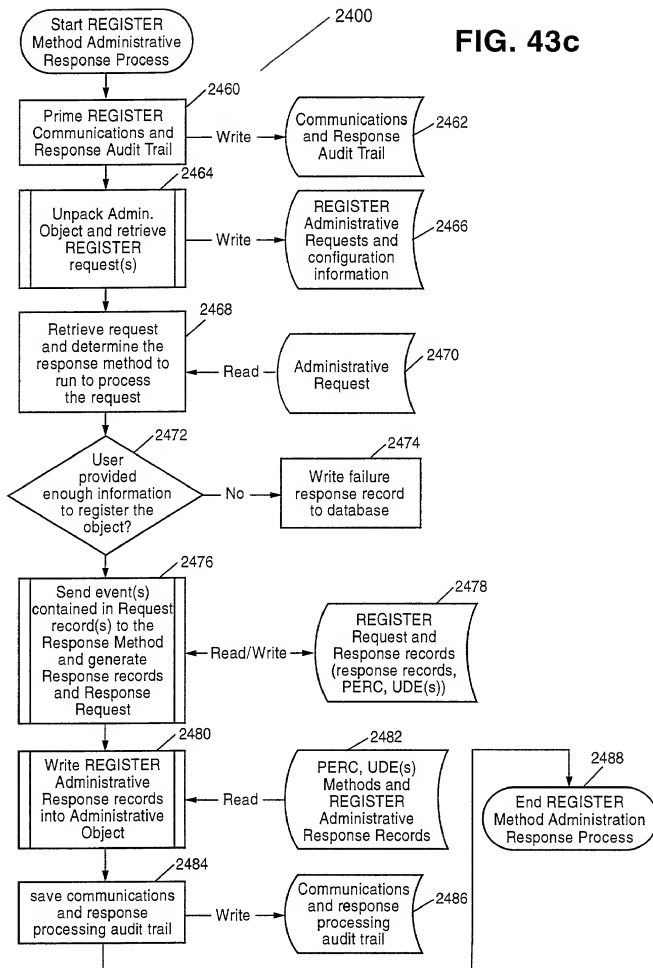
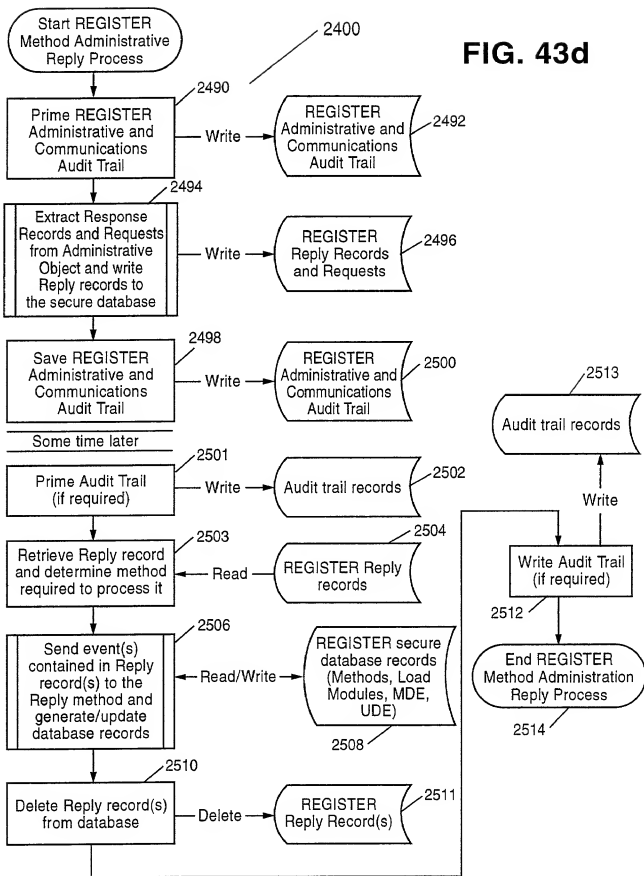


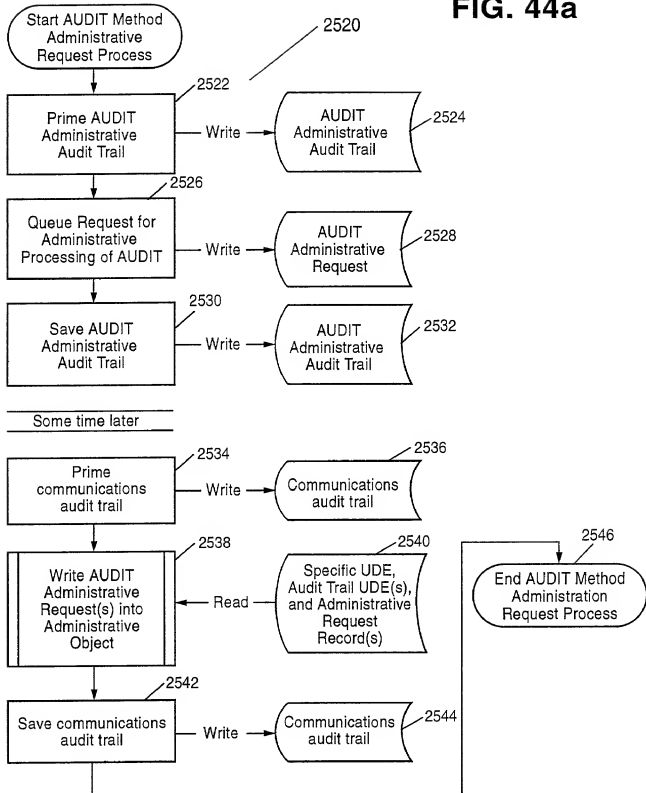
FIG. 43b







**FIG. 44a**



106270.0649760

FIG. 44b

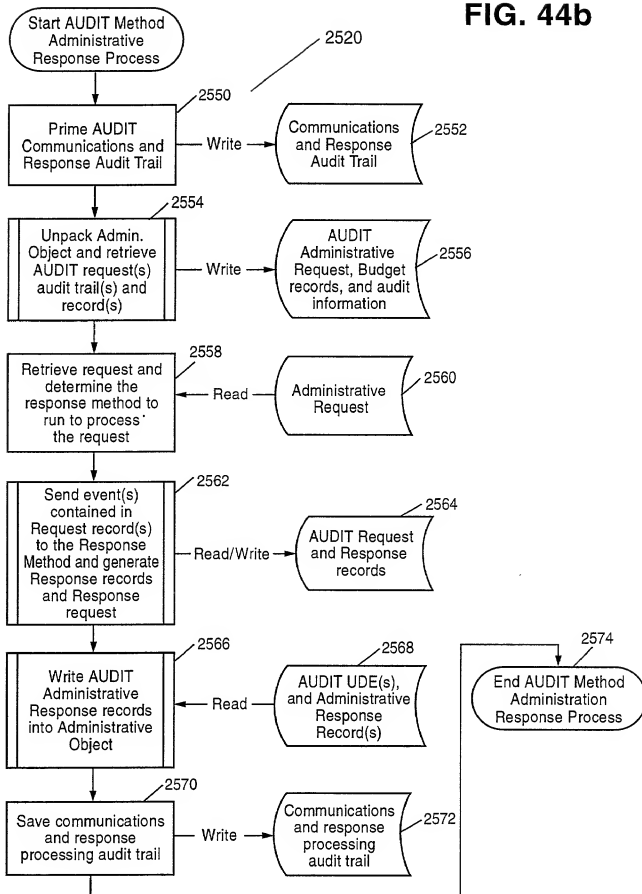


FIG. 44c

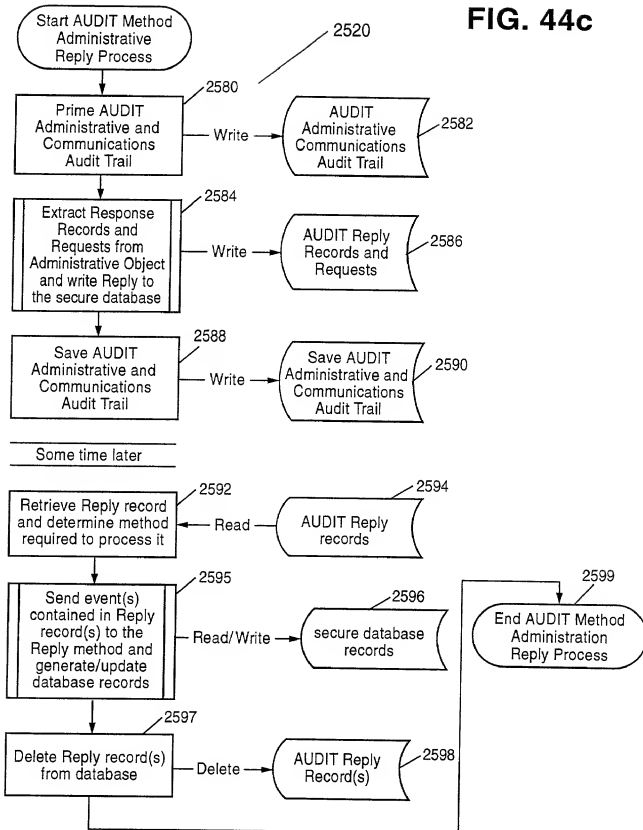




FIG. 45

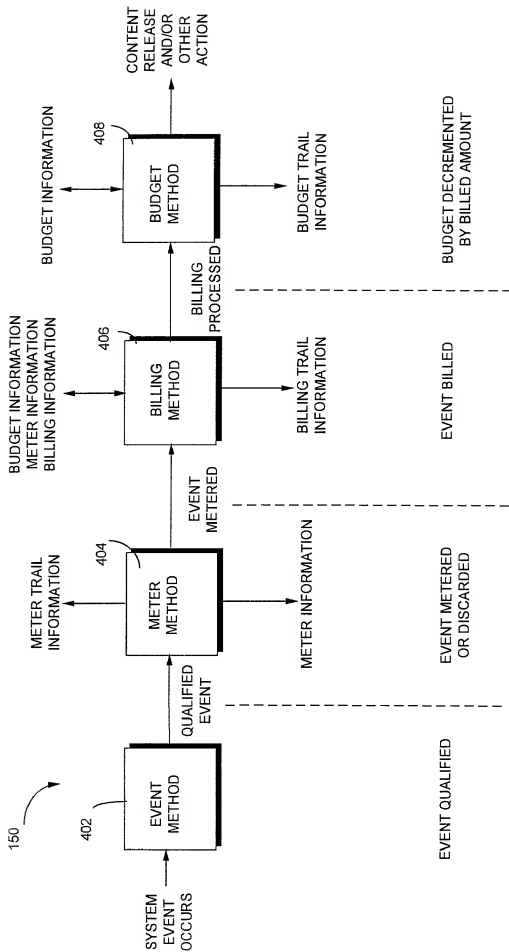
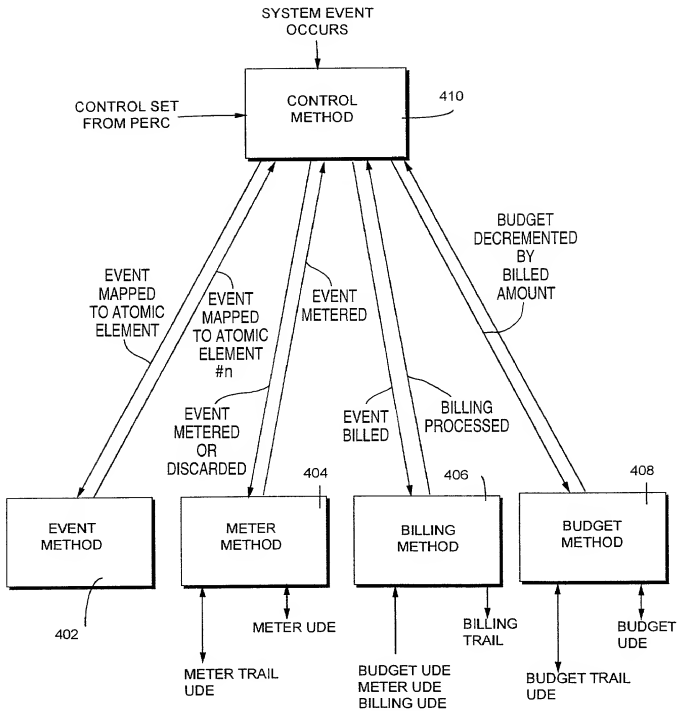
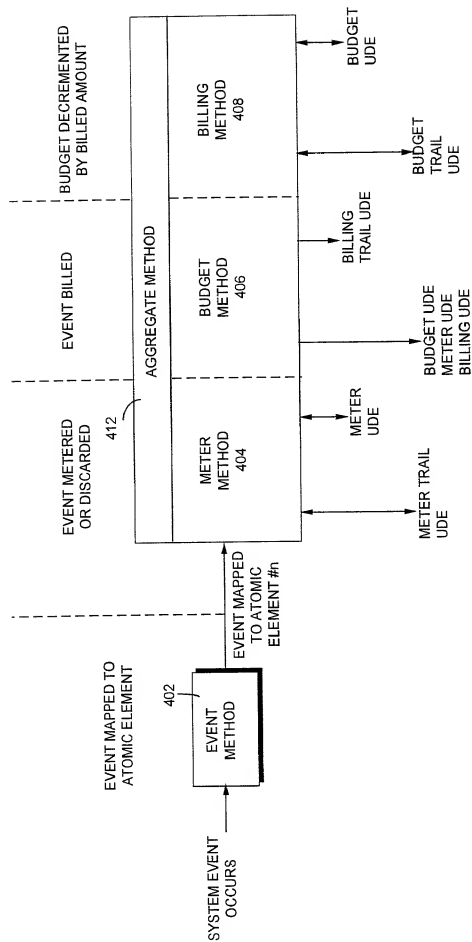


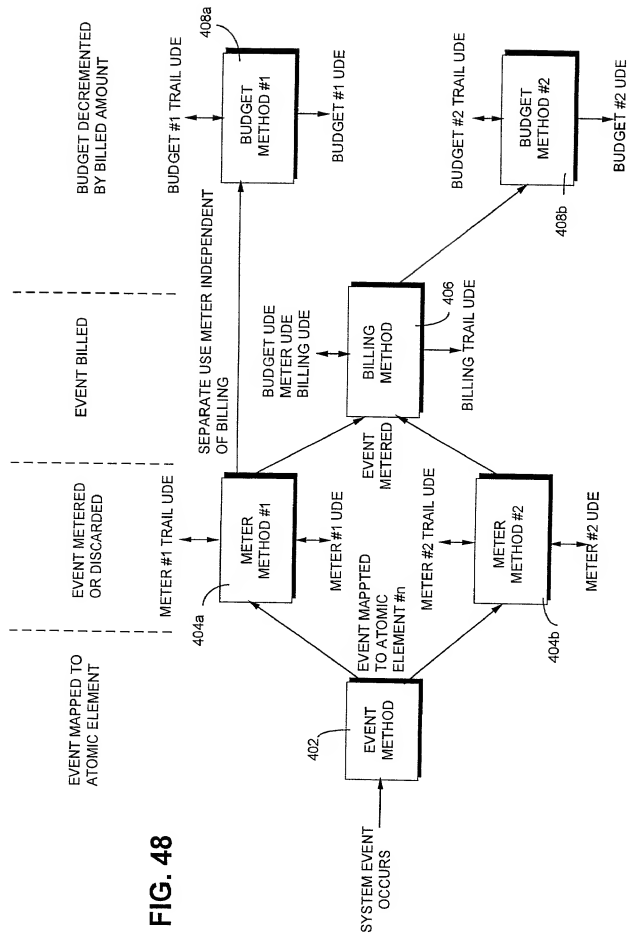
FIG. 46



09764370.072301

FIG. 47





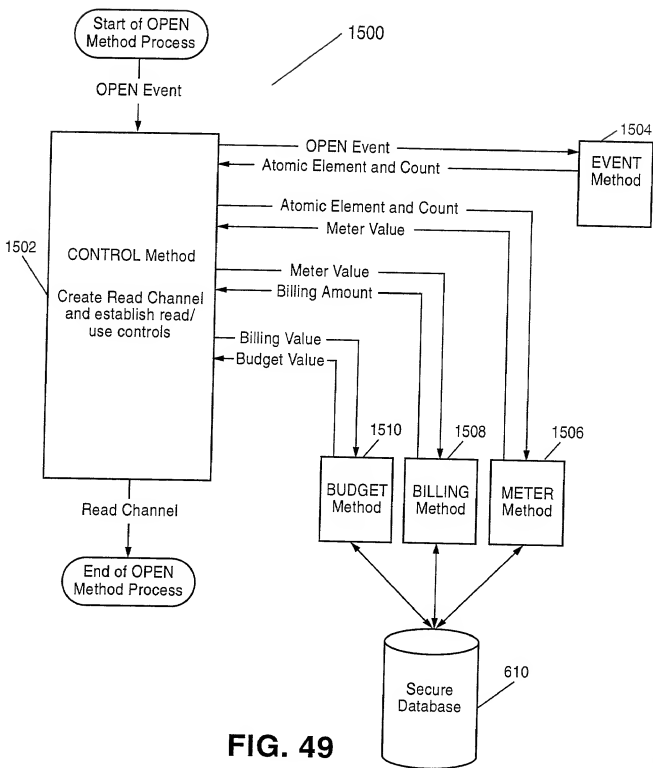


FIG. 49

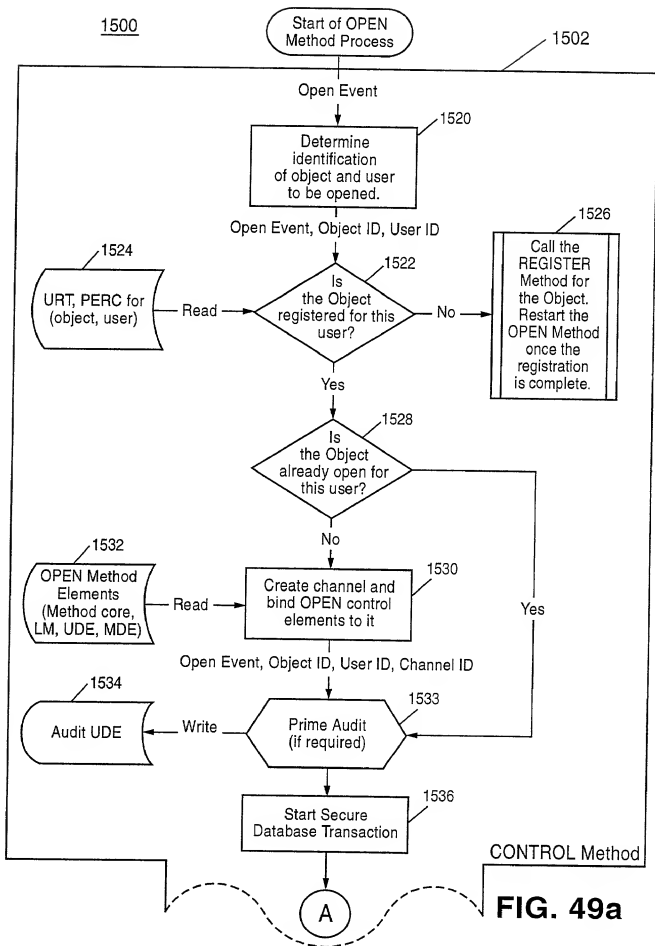
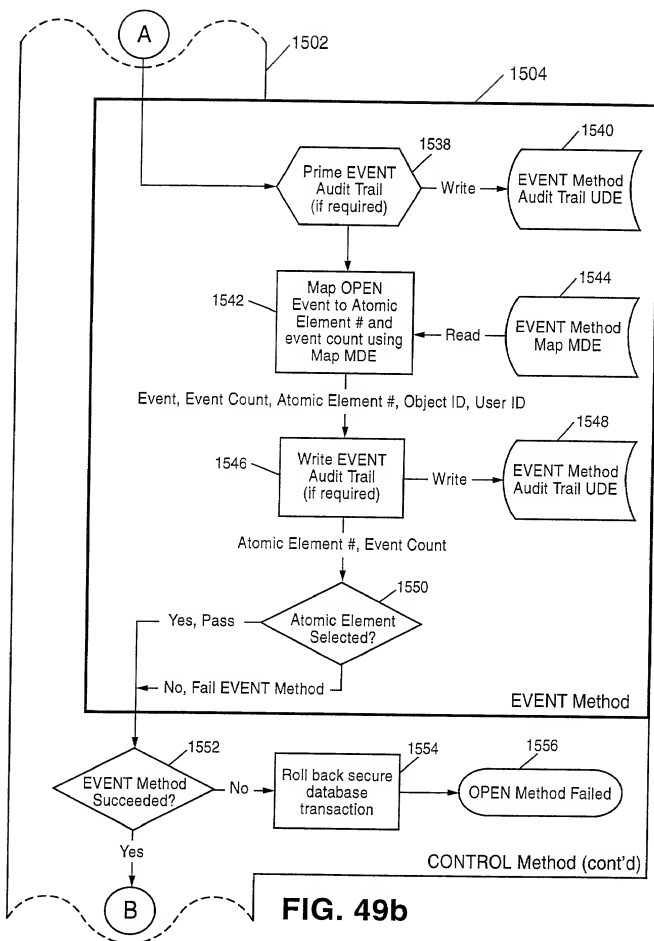


FIG. 49a



**FIG. 49b**

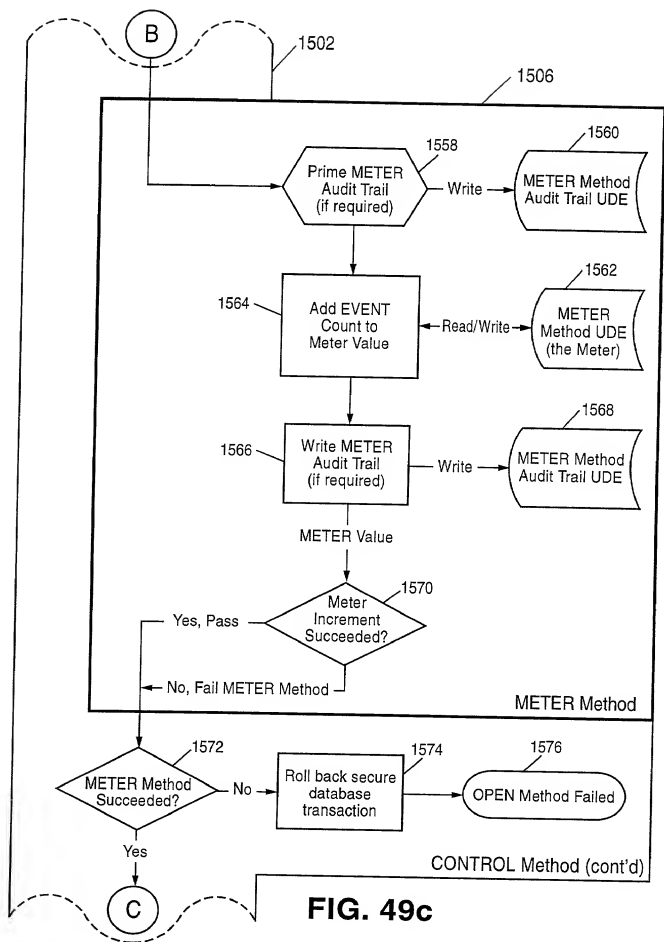
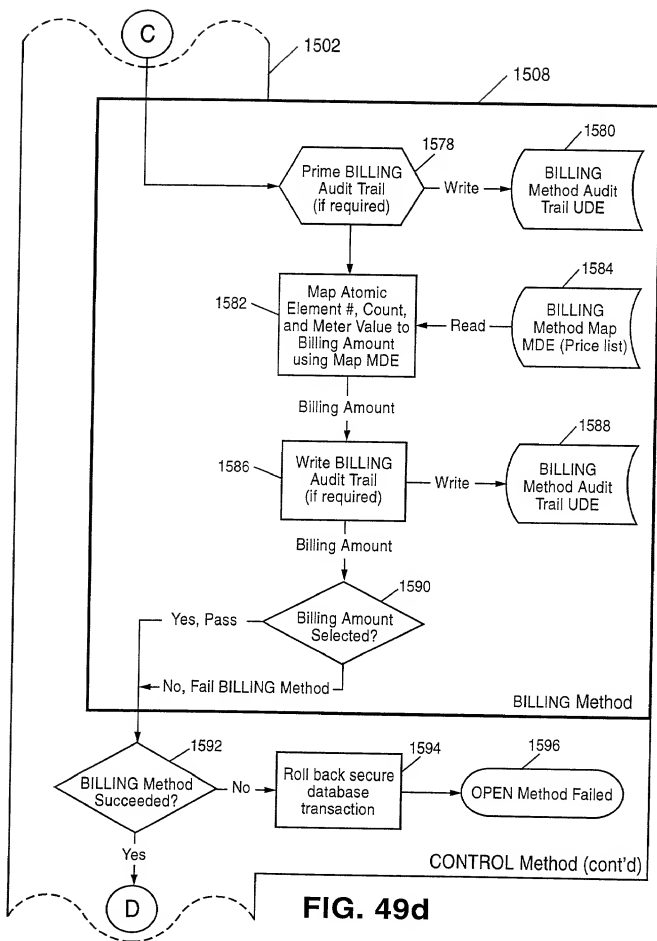
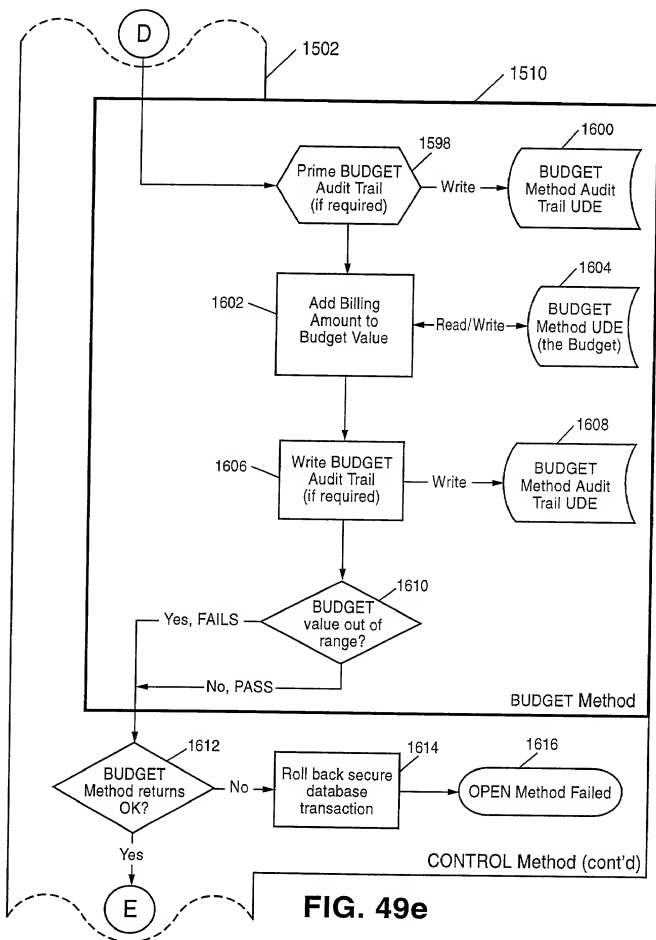


FIG. 49c



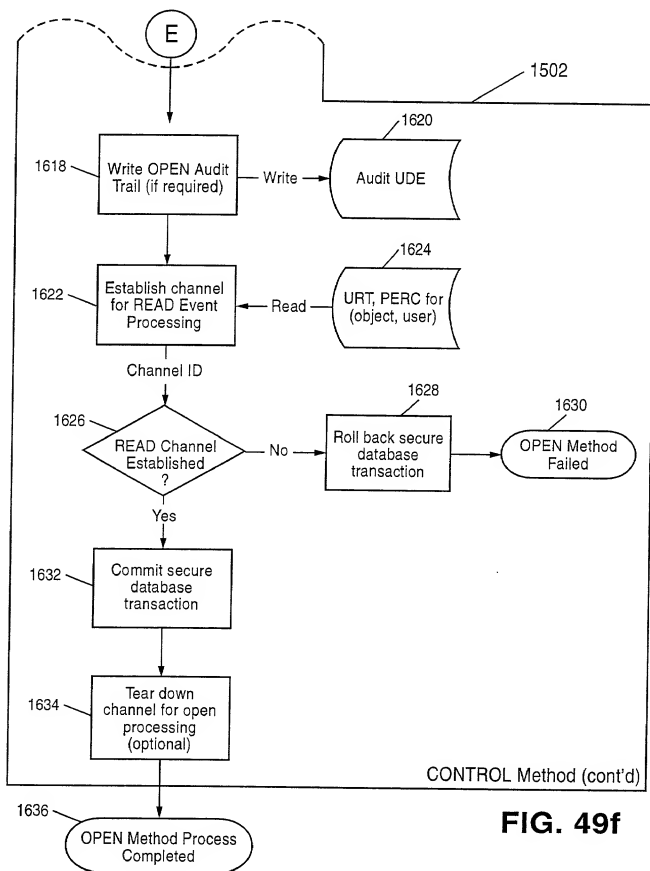


**FIG. 49d**

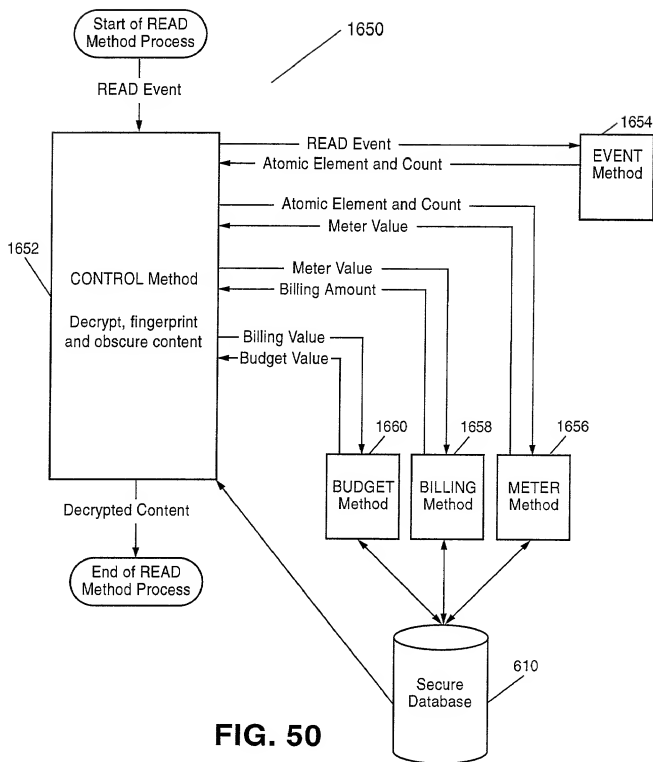


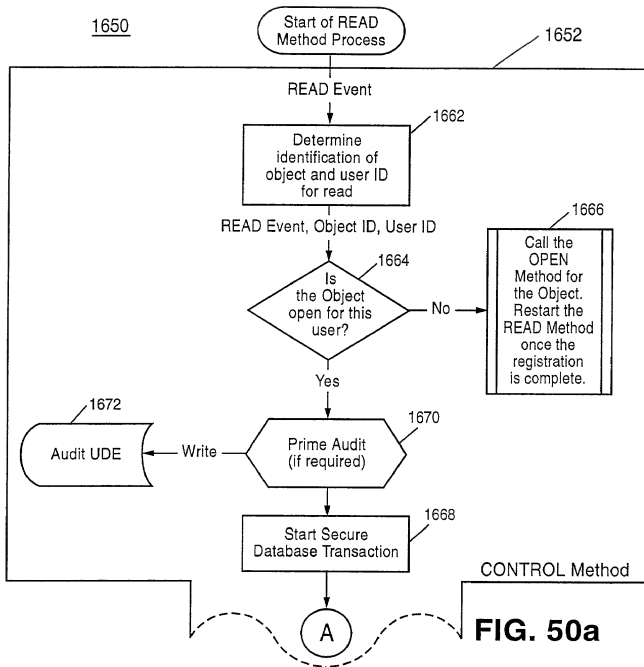
**FIG. 49e**

00761370.072304



**FIG. 49f**





**FIG. 50a**

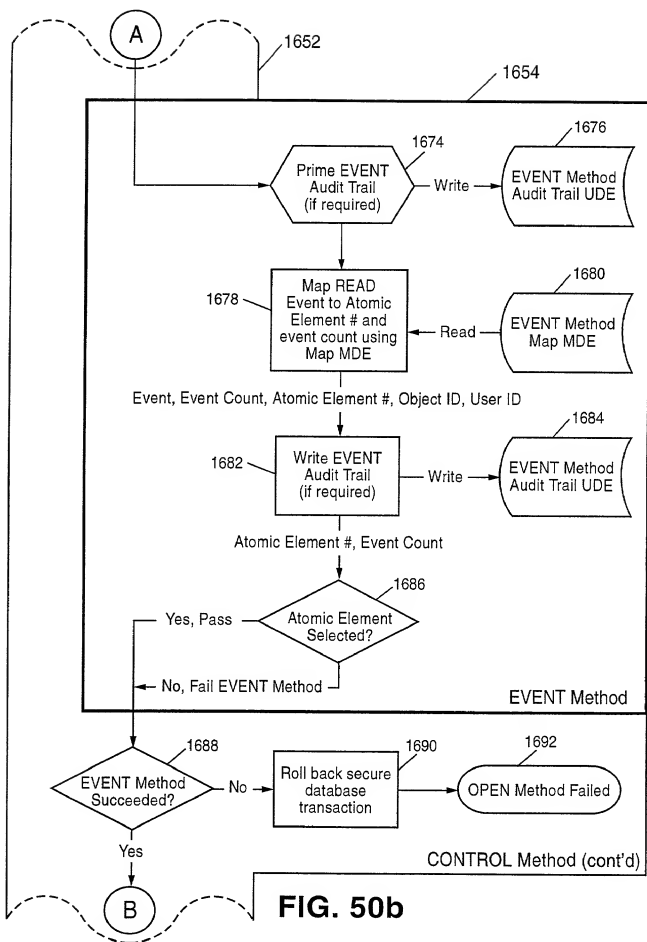


FIG. 50b

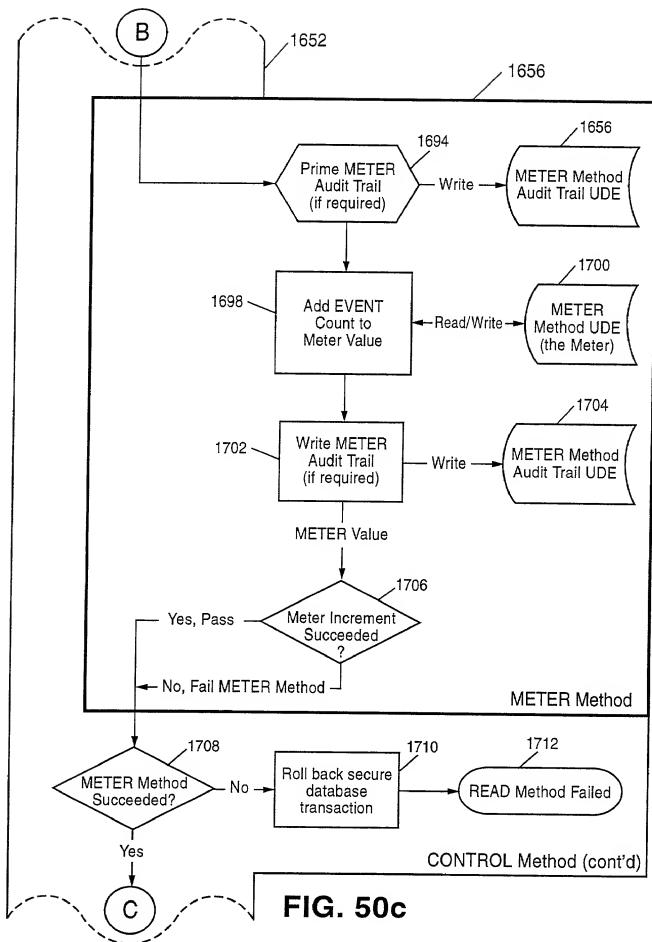
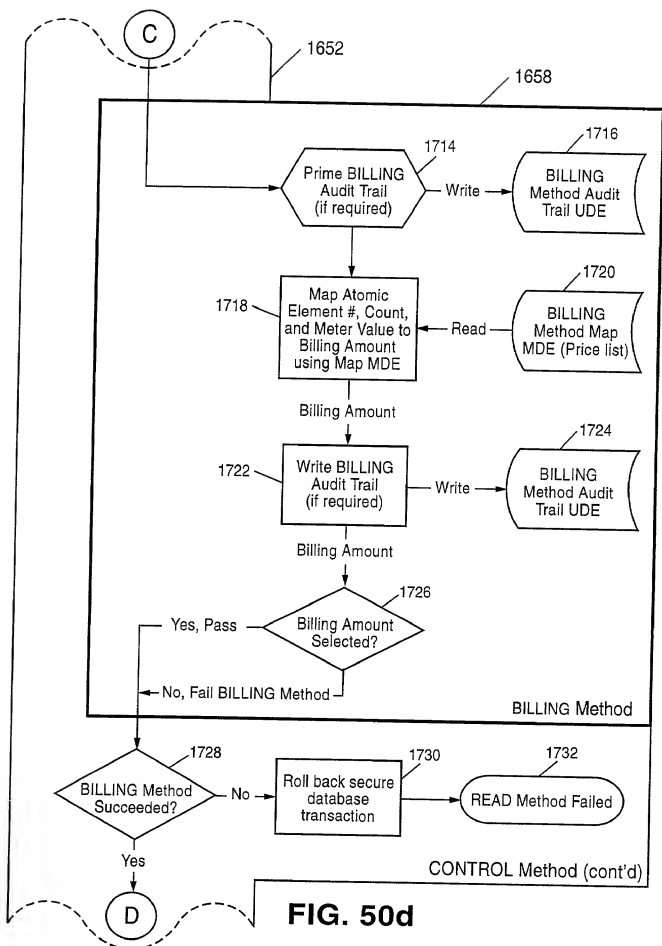


FIG. 50c



**FIG. 50d**



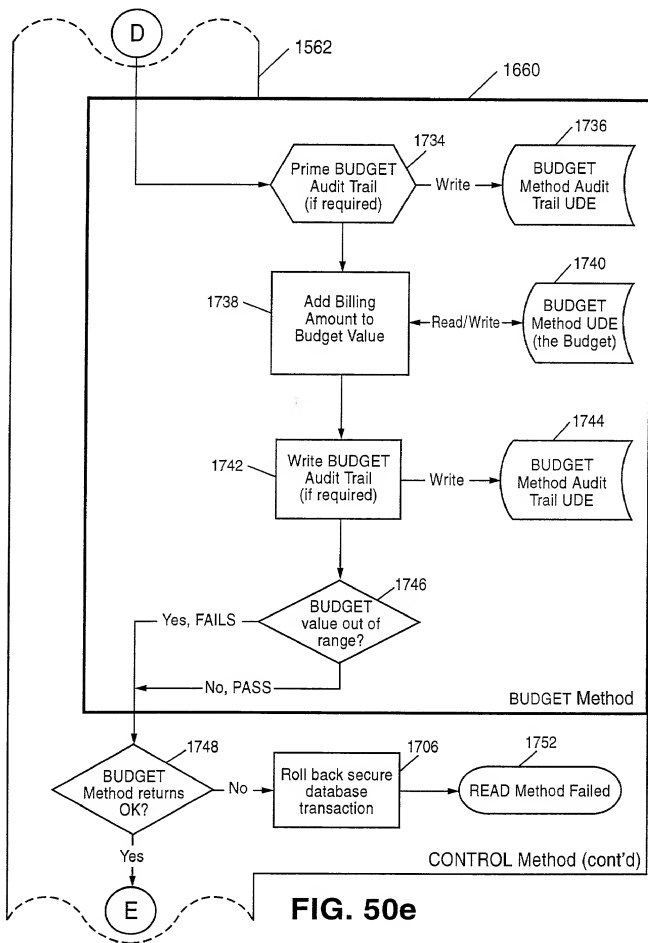
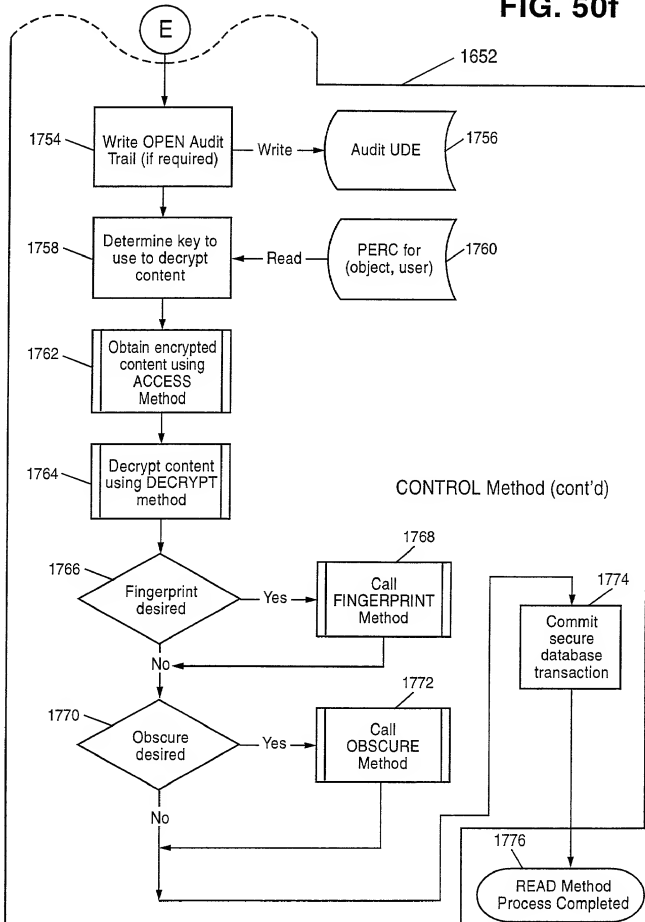
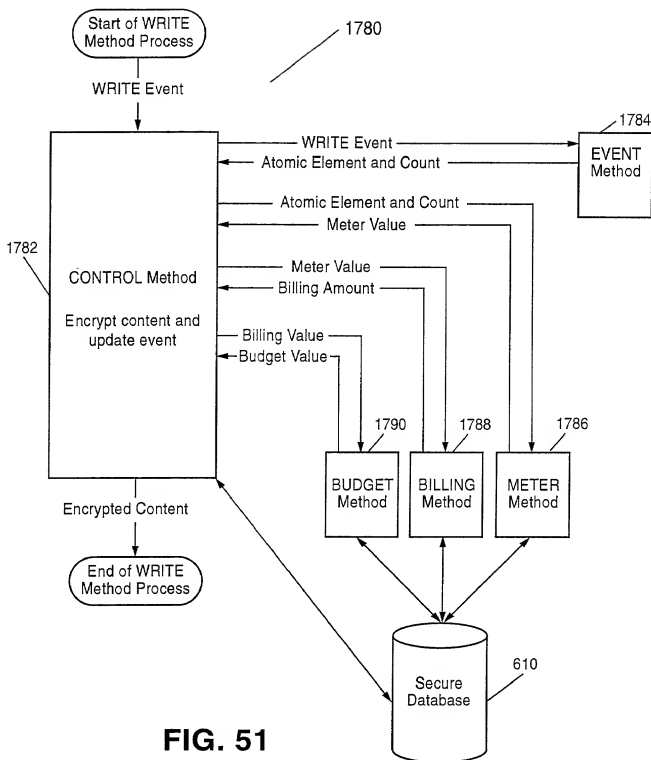
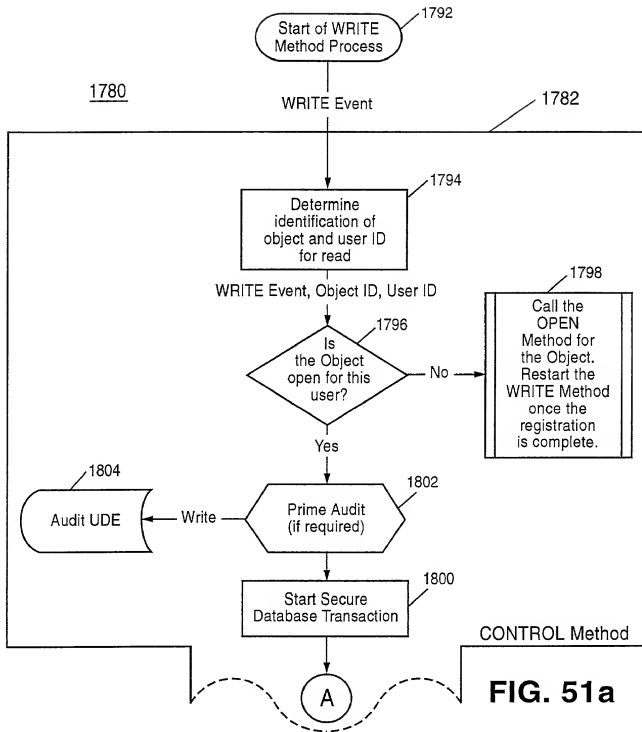


FIG. 50e

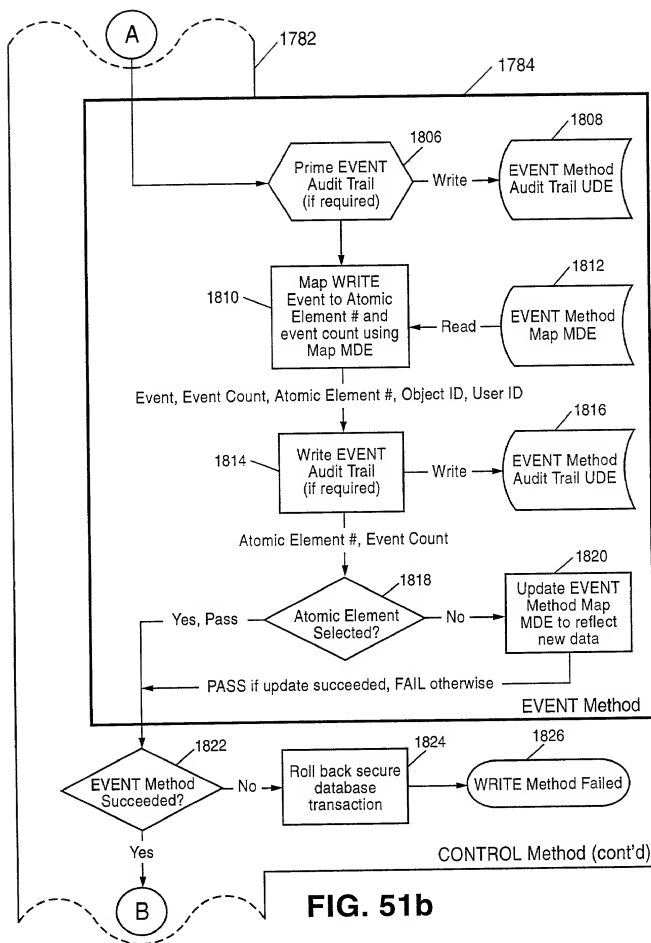
02570766







**FIG. 51a**



**FIG. 51b**



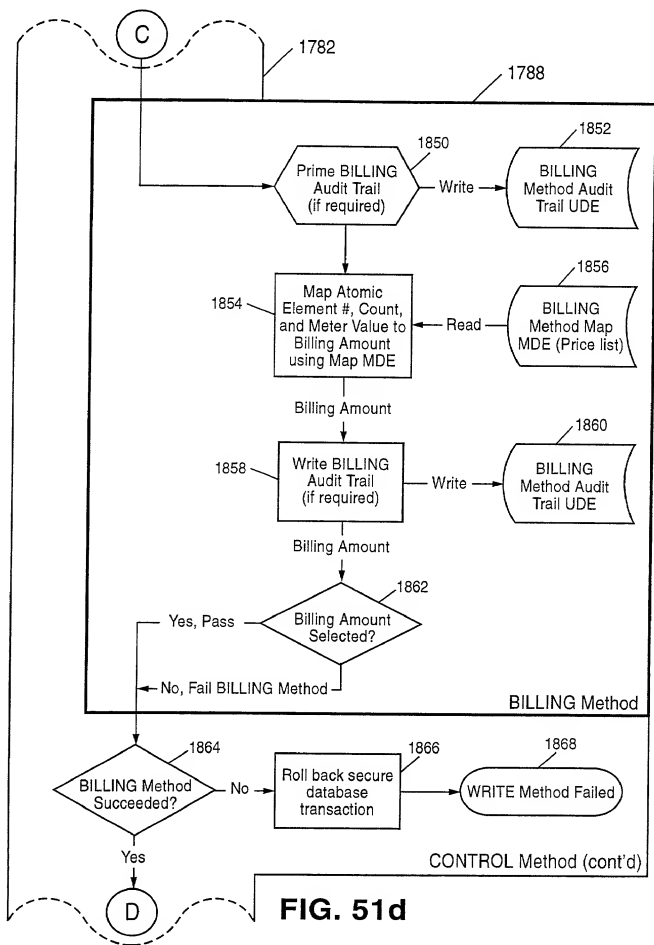


FIG. 51d

```

graph TD
    D((D)) -- 1782 --> 1790
    subgraph 1790 [BUDGET Method]
        1780{{Prime BUDGET Audit Trail (if required)}} -- Write --> 1872[BUDGET Method Audit Trail UDE]
        1874[Add Billing Amount to Budget Value] <--> |Read/Write| 1876[BUDGET Method UDE (the Budget)]
        1878[Write BUDGET Audit Trail (if required)] -- Write --> 1880[BUDGET Method Audit Trail UDE]
        1882{BUDGET value out of range?}
        1882 -- "Yes, FAILS" --> 1884
        1882 -- "No, PASS" --> 1884
    end
    1884{BUDGET Method returns OK?}
    1884 -- No --> 1886[Roll back secure database transaction]
    1886 --> 1888[WRITE Method Failed]
    1884 -- Yes --> E((E))
    1888 -- "CONTROL Method (cont'd)" --> E

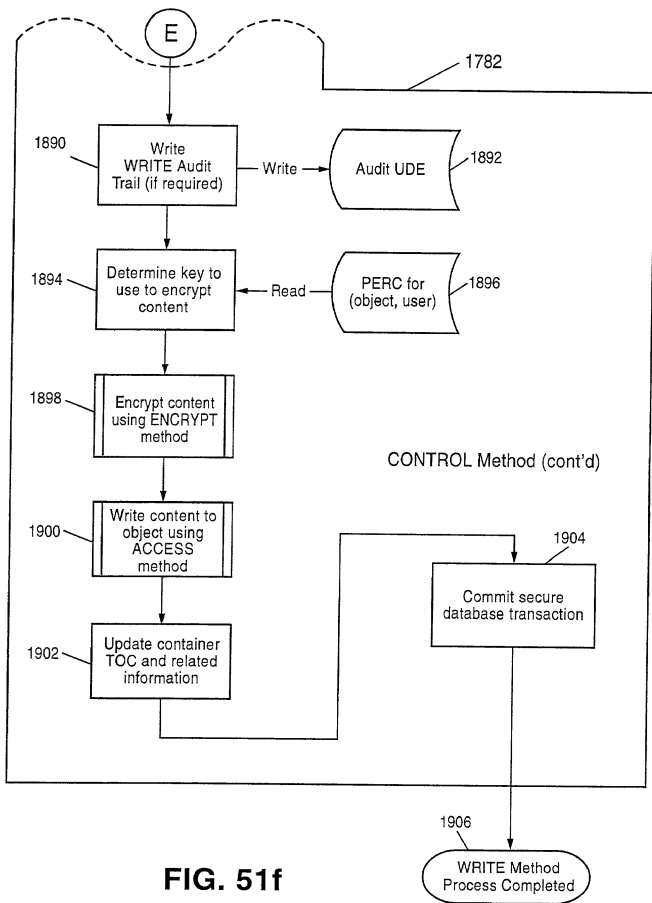
```

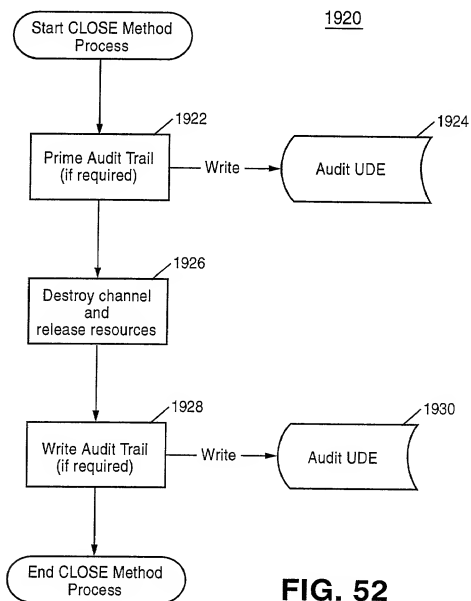
**FIG. 51e**

**FIG. 51e**



0064370 072001  
10020-000000



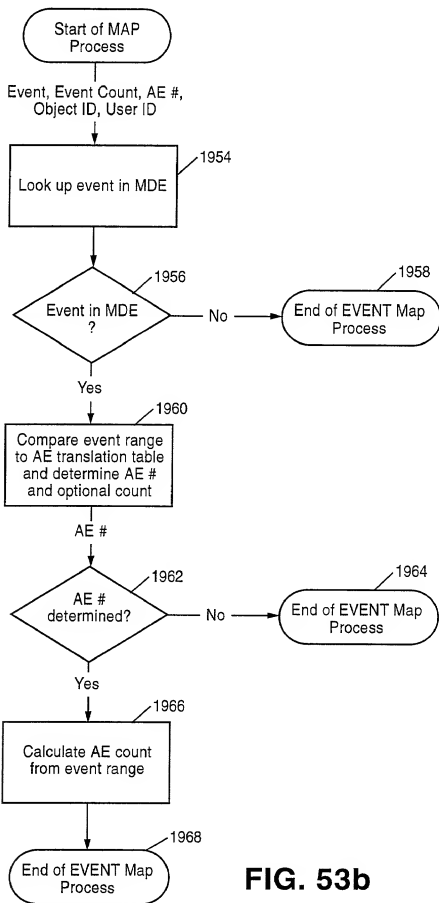
**FIG. 52**

```

graph TD
    Start([EVENT Method Start]) --> Input[EVENT, Event Count,  
Event Parameters]
    Input --> 1940
    1940 --> 1942{{Prime EVENT  
Audit Trail  
(if required)}}
    1942 -- Write --> 1944[EVENT Method  
Audit Trail UDE]
    1942 --> 1946[Load MAP MDE DTD]
    1946 --> 1948[EVENT Method  
Map DTD]
    1948 -- Read --> 1946
    1946 --> 1950[Map Event to Atomic  
Element # and event  
count using Map MDE]
    1950 --> 1952[EVENT Method  
Map MDE]
    1952 -- Read --> 1950
    1950 --> 1970[Event, Event Count, Atomic Element #,  
Object ID, User ID]
    1970 --> 1970
    1970 --> 1972[Write EVENT Audit  
Trail (if required)]
    1972 -- Write --> 1972
    1972 --> 1976[EVENT Method  
Audit Trail UDE]
    1972 --> 1974{Atomic Element  
Selected?}
    1974 -- No --> 1976
    1974 --> 1978([EVENT Method  
Succeeded])

```

**FIG. 53a**

**FIG. 53b**

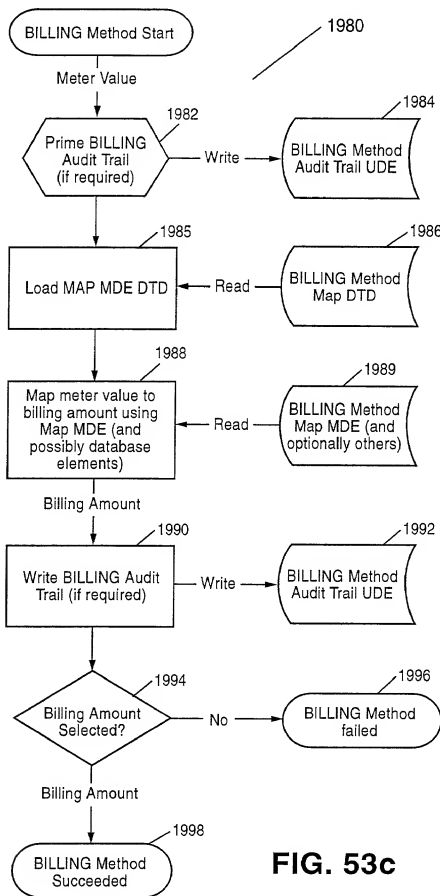
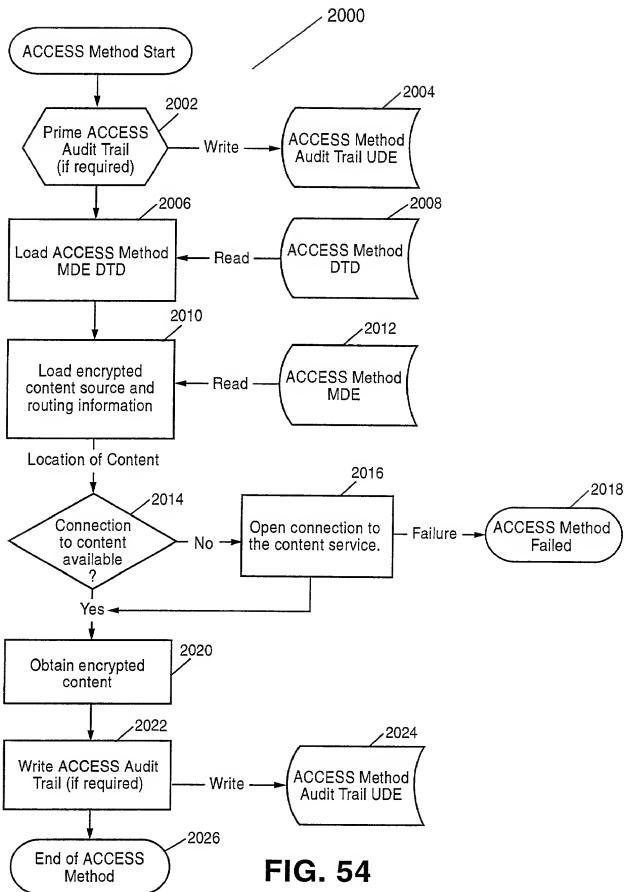
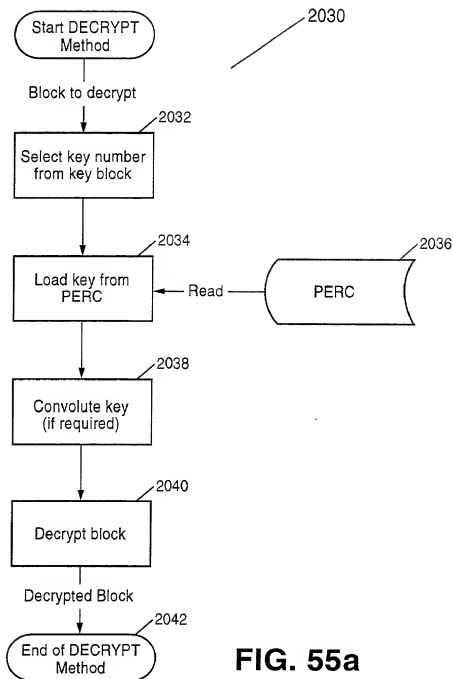


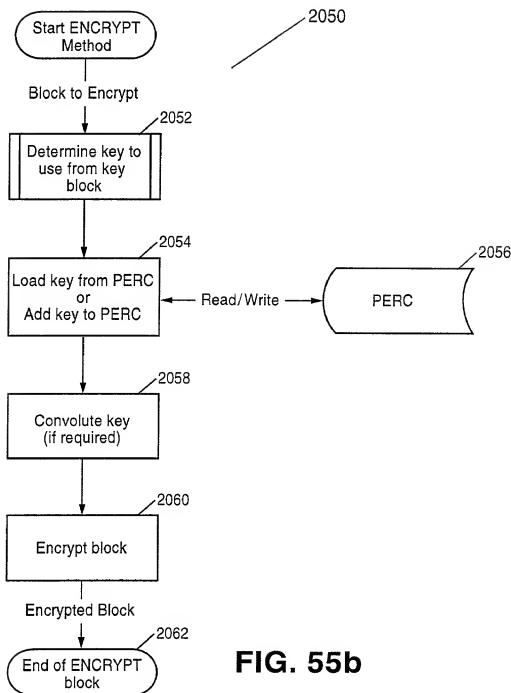
FIG. 53c



**FIG. 54**



**FIG. 55a**



**FIG. 55b**



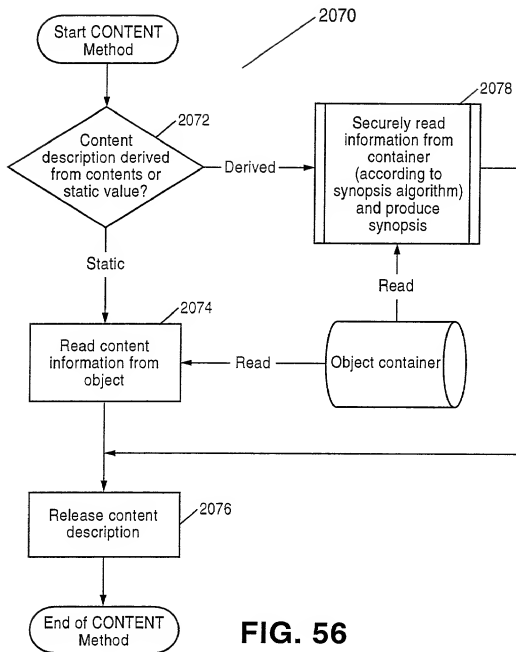


FIG. 56

100220.024960

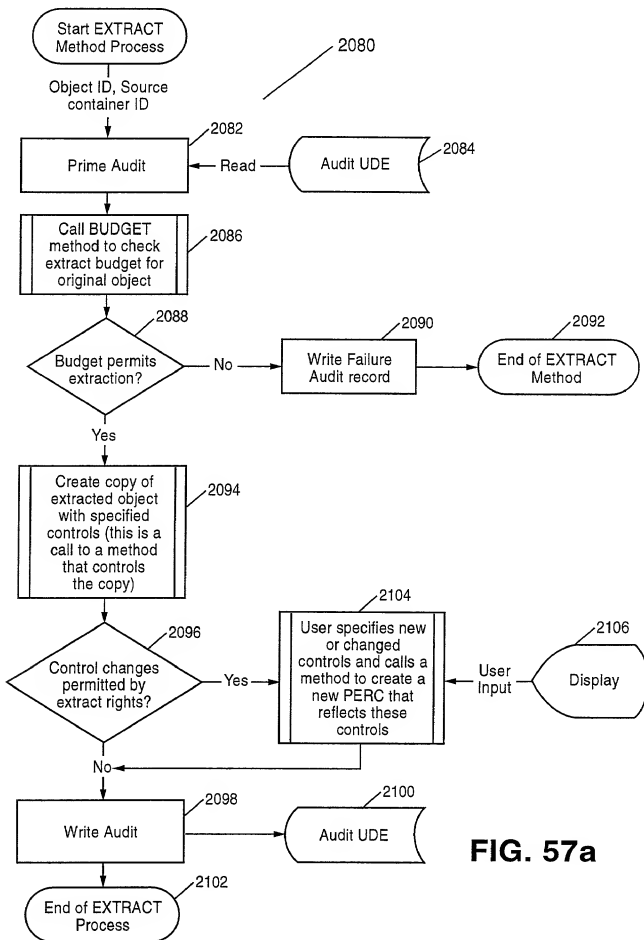
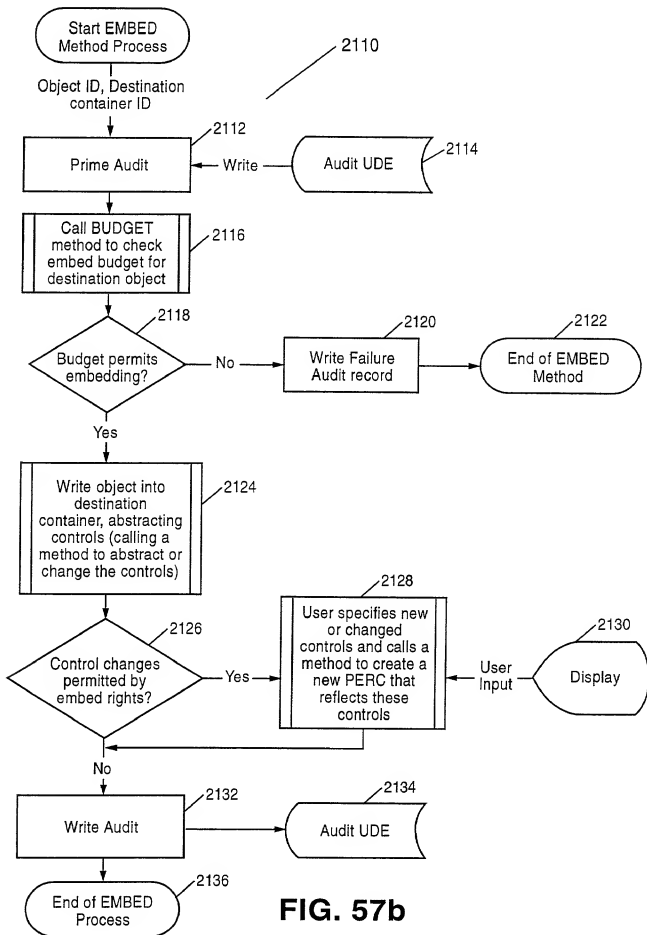
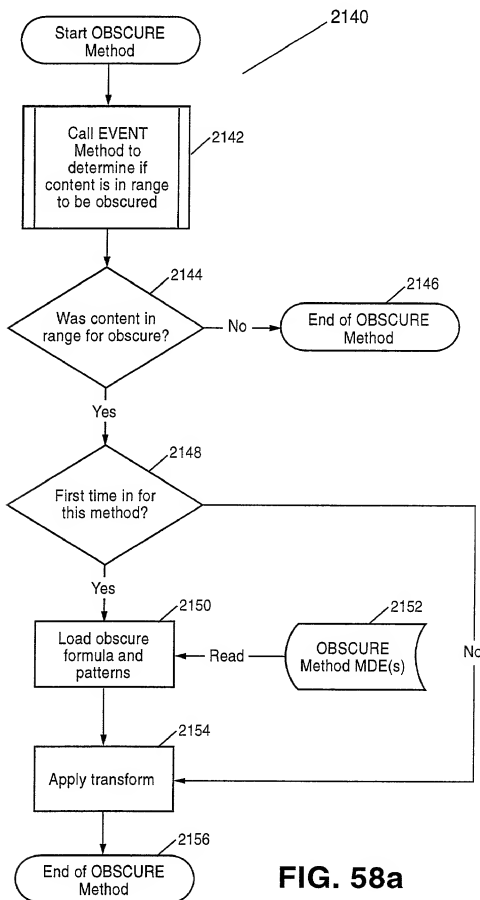


FIG. 57a



**FIG. 57b**



**FIG. 58a**

09764570-02301

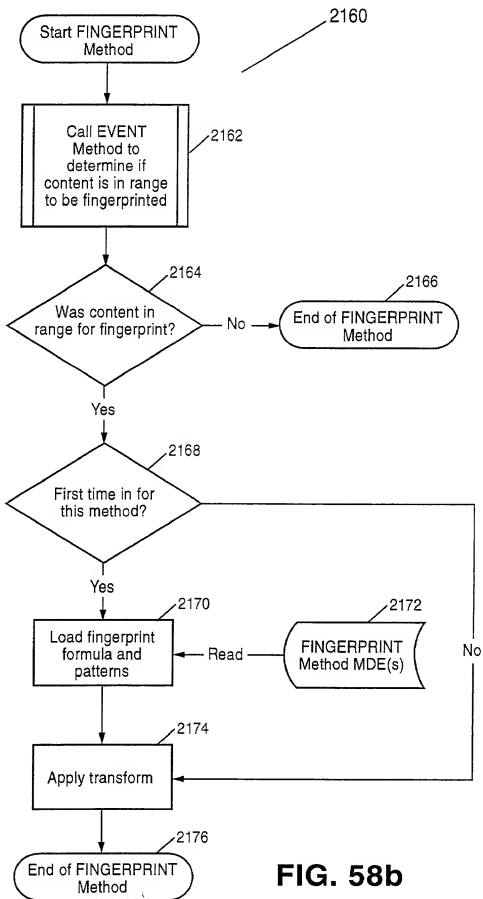


FIG. 58b

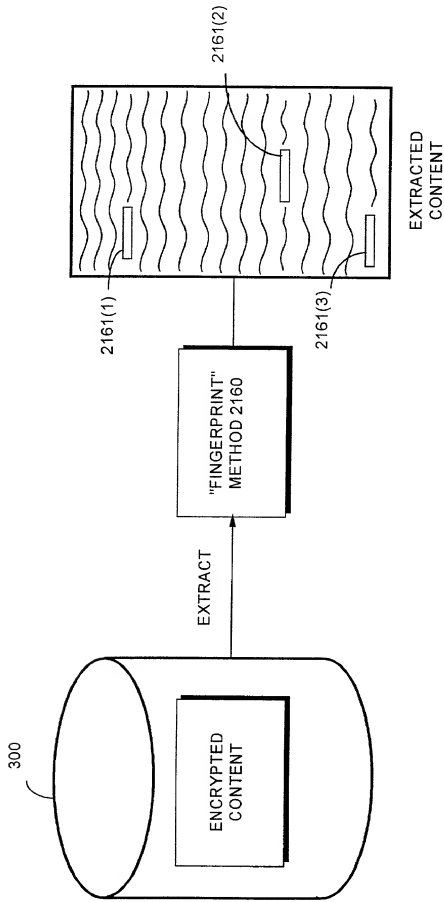


FIG. 58C

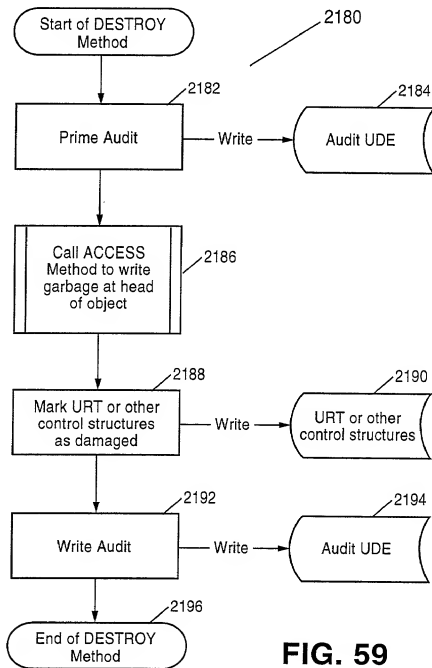
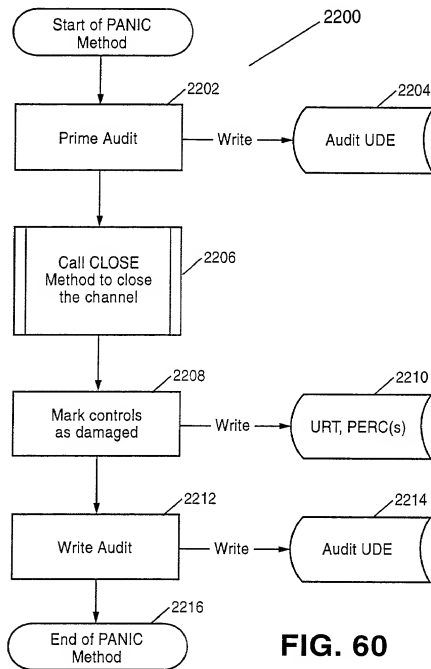


FIG. 59



**FIG. 60**



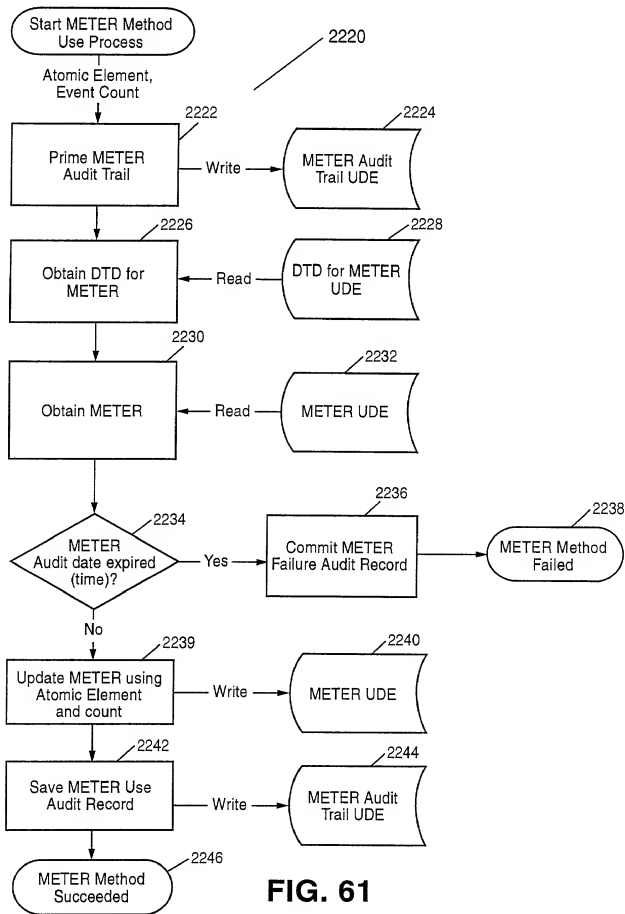
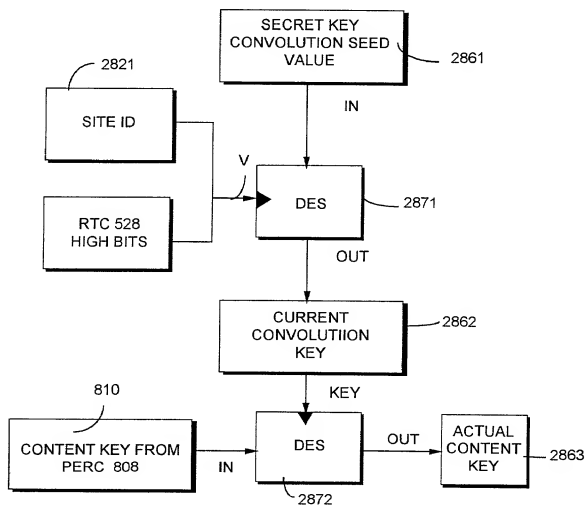


FIG. 61

FIG. 62



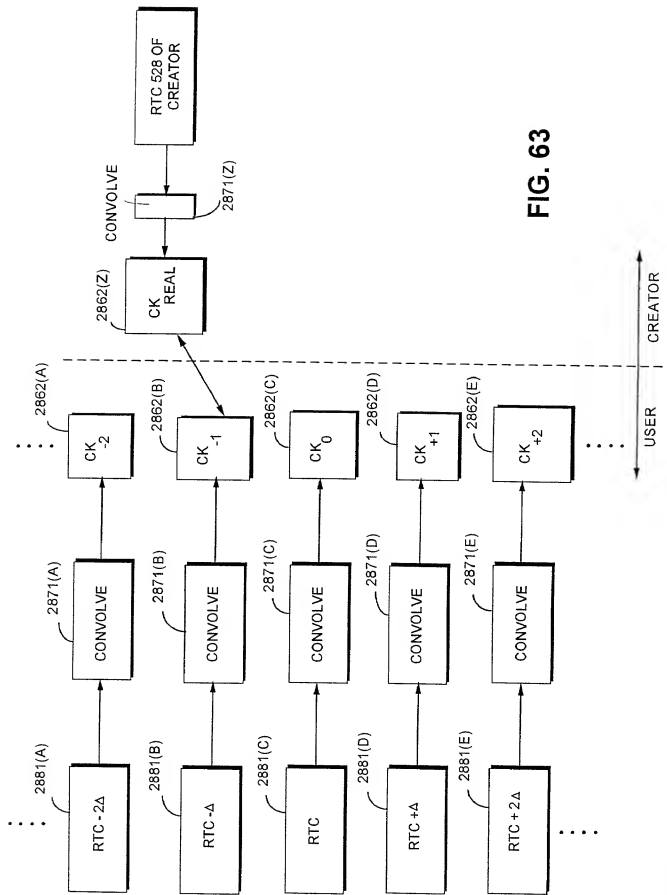


FIG. 63

FIG. 64

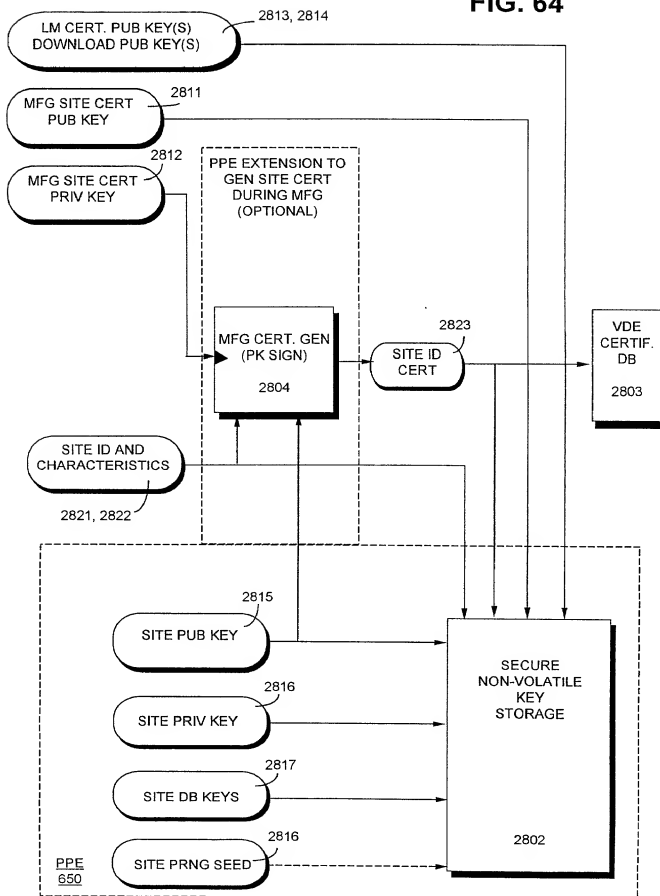


FIG. 65

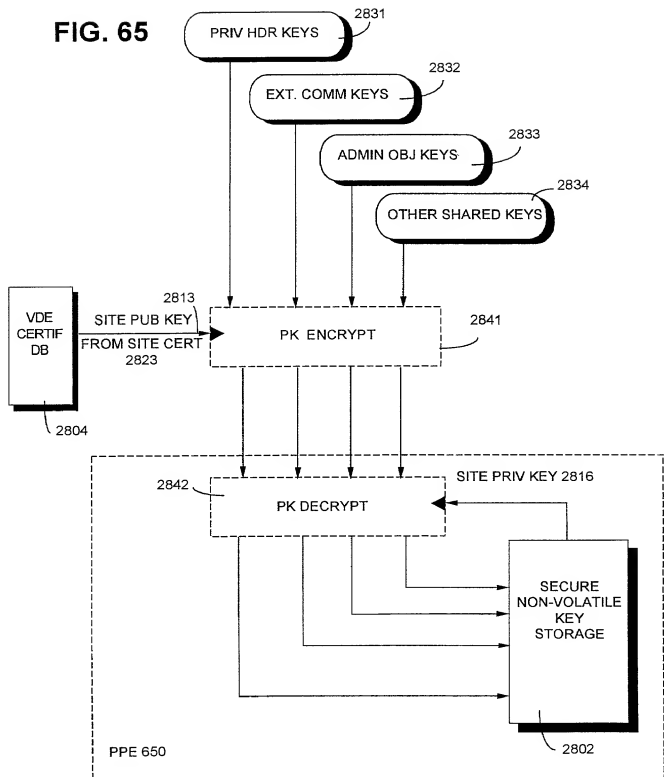
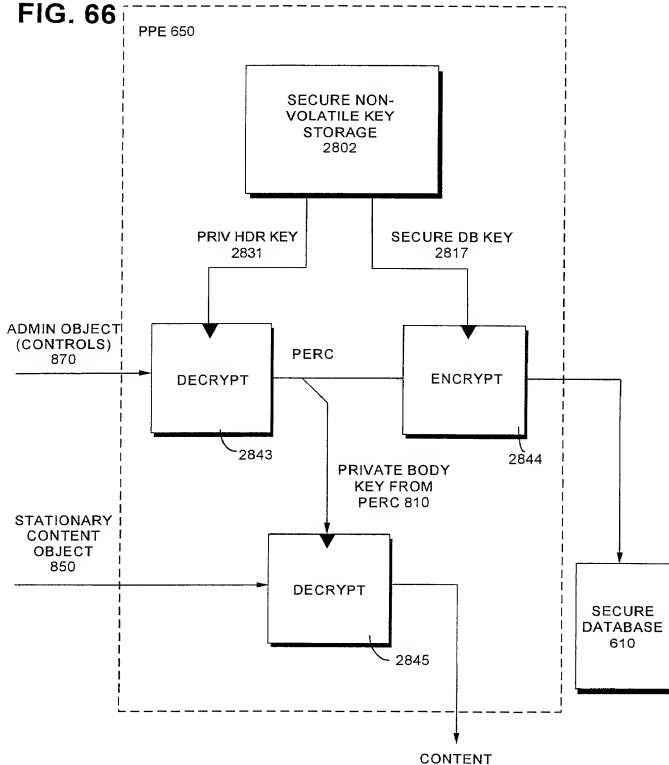


FIG. 66



105220 0254760

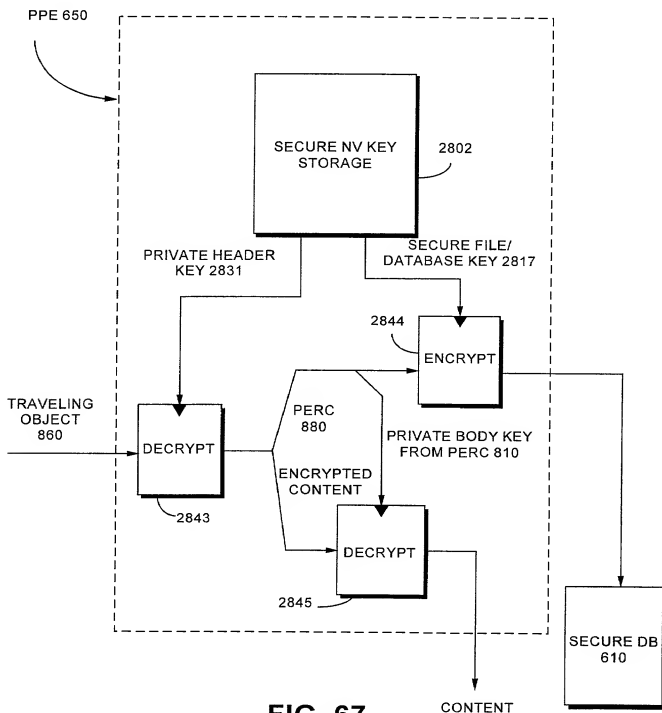
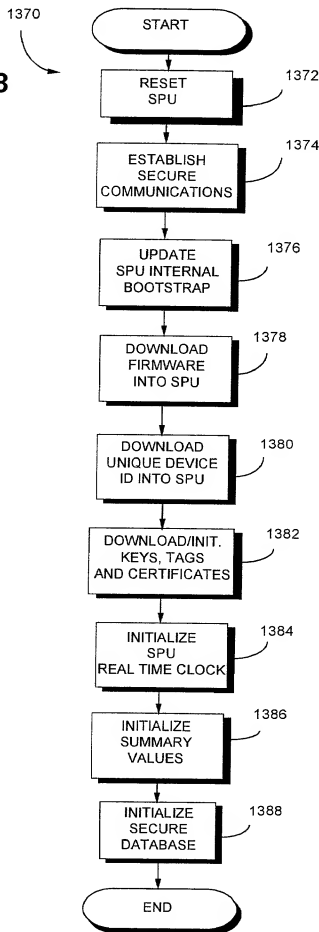


FIG. 67

FIG. 68







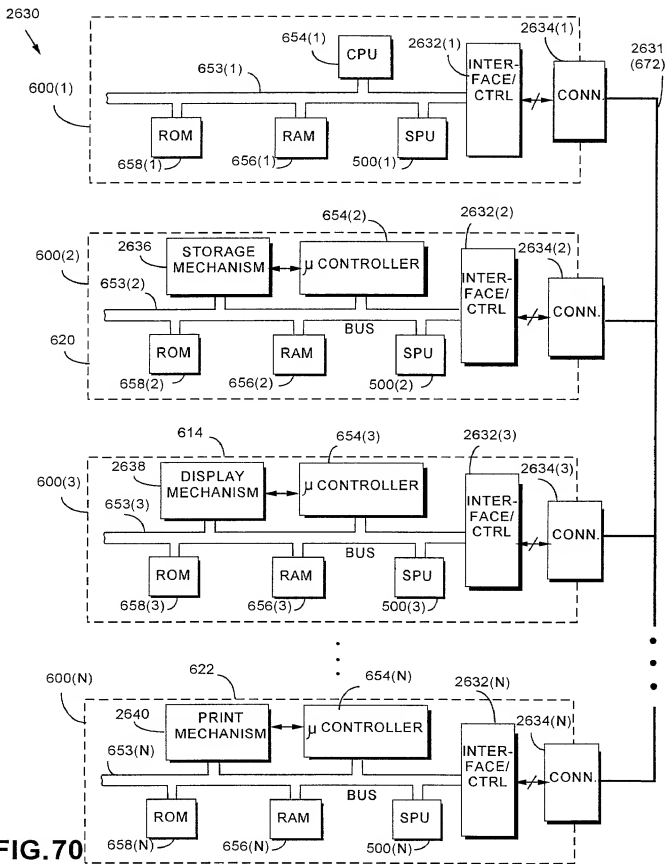
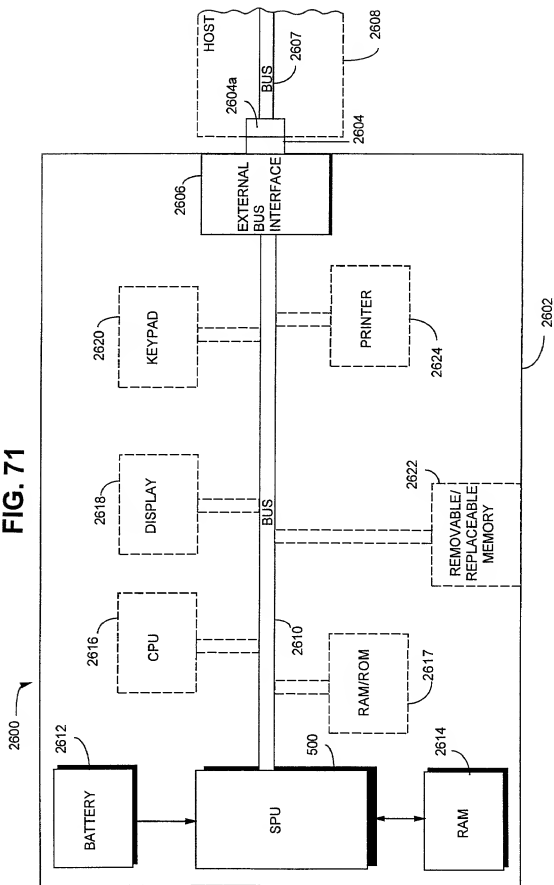


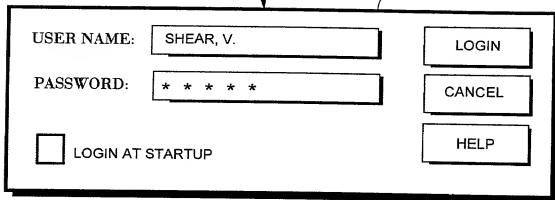
FIG. 70

FIG. 71



LOG IN USER INTERFACE

182

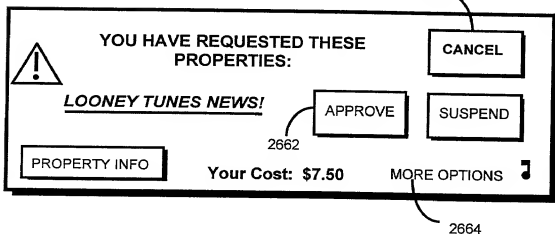


A diagram of a login user interface. It features a rectangular box with a thick border. Inside, on the left, are two input fields: the first is labeled "USER NAME:" and contains the text "SHEAR, V."; the second is labeled "PASSWORD:" and contains five asterisks. Below these is a checkbox labeled "LOGIN AT STARTUP". On the right side of the box are three buttons stacked vertically: "LOGIN", "CANCEL", and "HELP". A label "182" with a curved arrow points to the top right corner of the box.

FIG. 72A

FIG. 72B

2660



A diagram of a property request confirmation dialog. It features a rectangular box with a thick border. In the top left corner is a warning icon (a triangle with an exclamation mark). To its right, the text "YOU HAVE REQUESTED THESE PROPERTIES:" is displayed. Below this text is the property name "LOONEY TUNES NEWS!". In the bottom left corner is a button labeled "PROPERTY INFO". In the bottom center, the text "Your Cost: \$7.50" is displayed. To the right of the cost is a button labeled "APPROVE". Further right is a button labeled "SUSPEND". In the top right corner is a button labeled "CANCEL". At the bottom right, the text "MORE OPTIONS" is displayed next to a right-pointing arrow. A label "2660" with a curved arrow points to the "CANCEL" button. A label "2662" with a curved arrow points to the "APPROVE" button. A label "2664" with a curved arrow points to the "MORE OPTIONS" text.

FIG. 72C

**SET LIMITS:**

SESSION DOLLAR LIMIT: \$


TRANSACTION DOLLAR LIMIT: \$

TIME LIMIT (IN MINUTES):

UNIT LIMIT:

2666 2674 2668 2670 2672

FIG. 72D



**YOU HAVE REQUESTED THESE PROPERTIES:**

**CANCEL**


**SUSPEND**

**LOONEY TUNE NEWS!**

**PROPERTY INFO**

**YOUR COST : \$7.50**

**More Options**



Show Thumbnail

PROPERTY:	SIZE:	PUBLISHER:	AMOUNT:	UNITS:	COST/UNIT:	TYPE:	USE?	LINKS:	HIST:
CHUCK JONES BIOGRA...	256KB	WARNER NEW MEDIA	64	KBYTE	\$1.25	PREVIEW	✓	●	
▼ BUGS BUNNY.JPE...	1MB	WARNER NEW MEDIA	1	RECORD	\$5.00	DISPLAY	✓	▲	●
BUGS BUNNY.JPEG...	1MB	WARNER NEW MEDIA	10	RECORD	\$3.50	DISPLAY		▲	●
BUGS BUNNY.JPEG...	1MB	WARNER NEW MEDIA	25	RECORD	\$2.50	DISPLAY		▲	●
FRIZ FRELENG BIOGRA...	256KB	WARNER NEW MEDIA	120	SECTOR	\$5.00	PRINT			
TEX AVERY BIOGRAP...	256KB	WARNER NEW MEDIA	50	PERCENT	\$2.50	COPY		▲	
► DUCKI RABBITI DU...	64MB	WARNER NEW MEDIA	7.0	MINUTE	\$7.50	COPY-PRO			
MEL BLANC BIOGRAPH...	256KB	WARNER NEW MEDIA	1	SPECIAL	\$25.25	INSTALL		▲	
LOONEY TUNES DATAB...	600MB	WARNER NEW MEDIA	1	OBJECT	\$2000.00	ALL		▲	●

**SET LIMITS...**

**SHOW BUDGETS**

**ACQUIRE BUDGET...**

**HISTORY...**

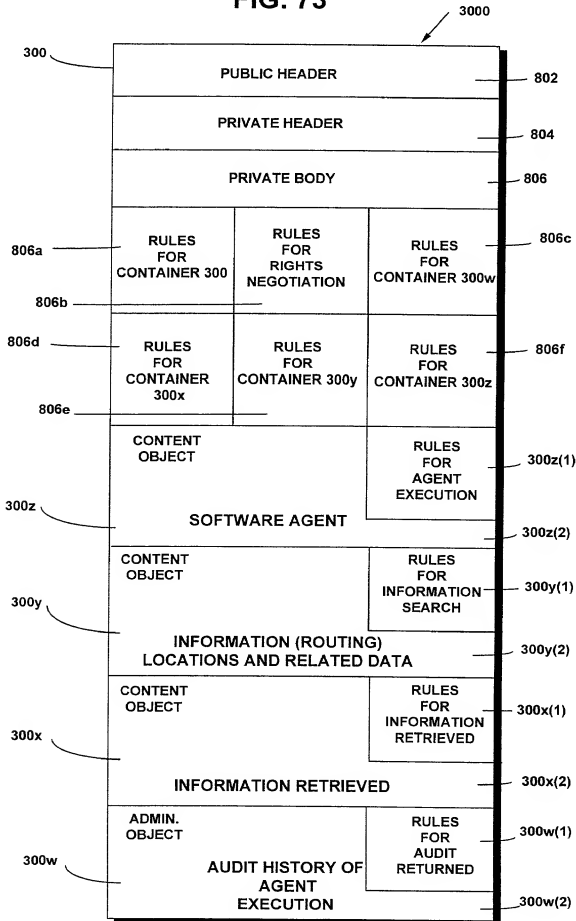
**TRANSFER...**

**PREFERENCES...**

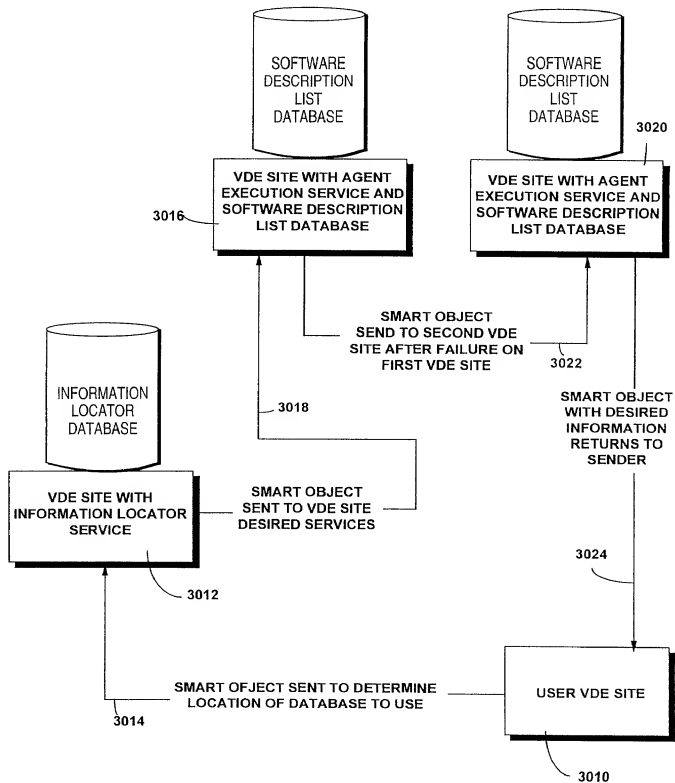
**FEEDBACK...**

**HELP!**

# FIG. 73



**FIG. 74**





# FIG. 75A

PERC HEADER		CSO		PRIVATE BODY KEYS	
USE RIGHT HDR		CSR		KEYS	
PERMITTED CONTROL SET (USE W/O INFO. PASSBACK)			CONTROL METHOD (VENDING)		
REQUIRED METHOD, BUDGET					
METHOD OPTION: VISA		METHOD OPTION: MASTERCARD		METHOD OPTION: AMEX	
REQUIRED METHOD, BILLING (\$100 FIXED, ONE TIME)					
DESIRED CONTROL SET (USE WITH INFO. PASSBACK)			CONTROL METHOD (VENDING WITH "RESPONSE CARD")		
REQUIRED METHOD, BUDGET					
METHOD OPTION: VISA		METHOD OPTION: MASTERCARD		METHOD OPTION: AMEX	
REQUIRED METHOD, AUDIT (COLLECTION PERSONAL INFORMATION)					
REQUIRED FIELDS		DESIRED FIELDS			
REQUIRED METHOD, BILLING (\$25 FIXED, ONE TIME)					

FIG. 75B

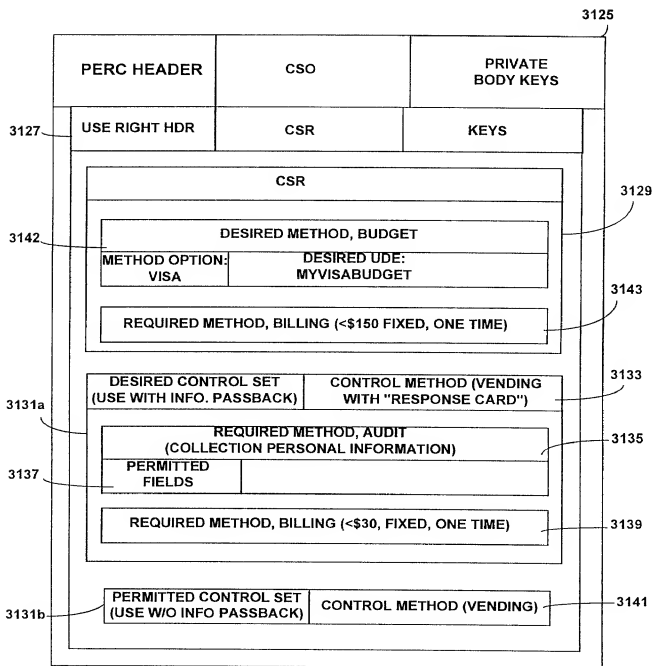
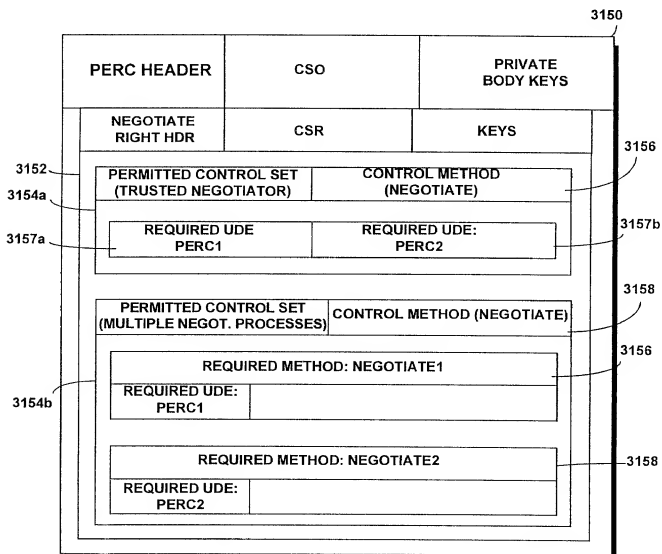
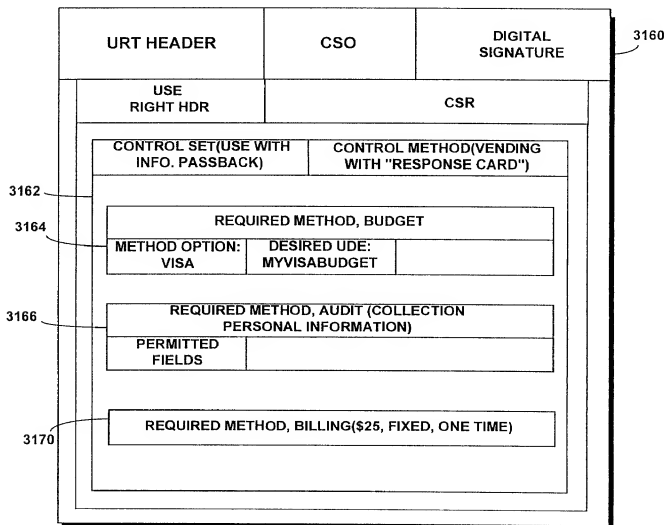


FIG. 75C





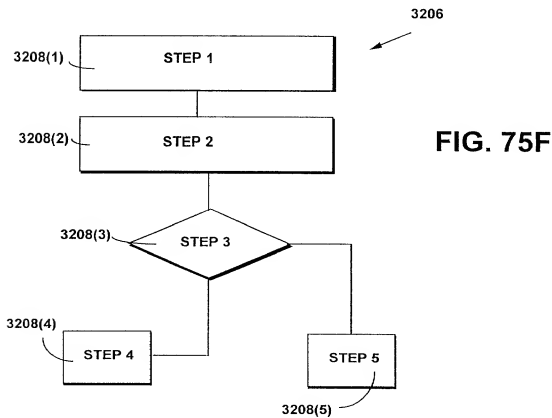
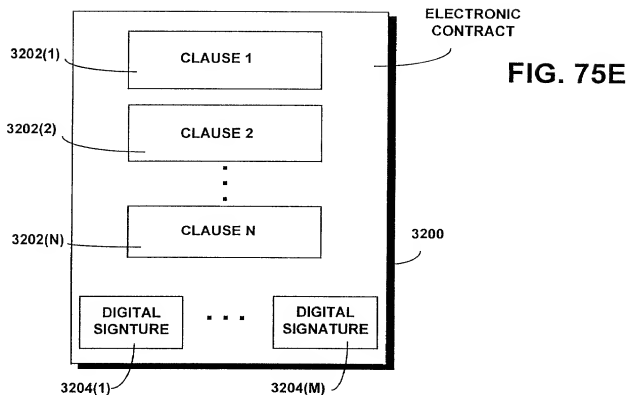


FIG. 76A

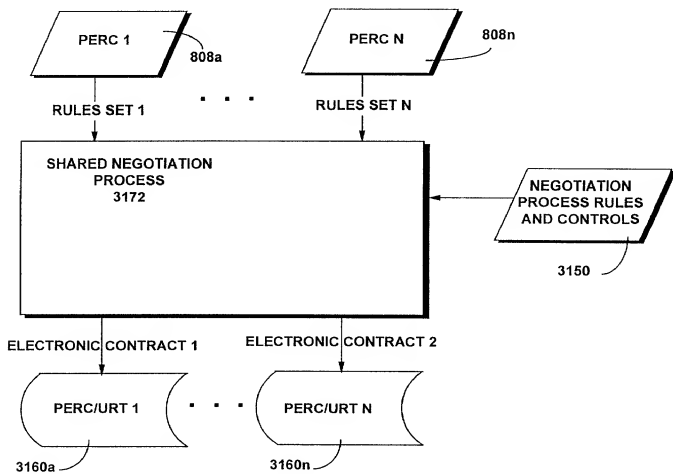


FIG. 76B

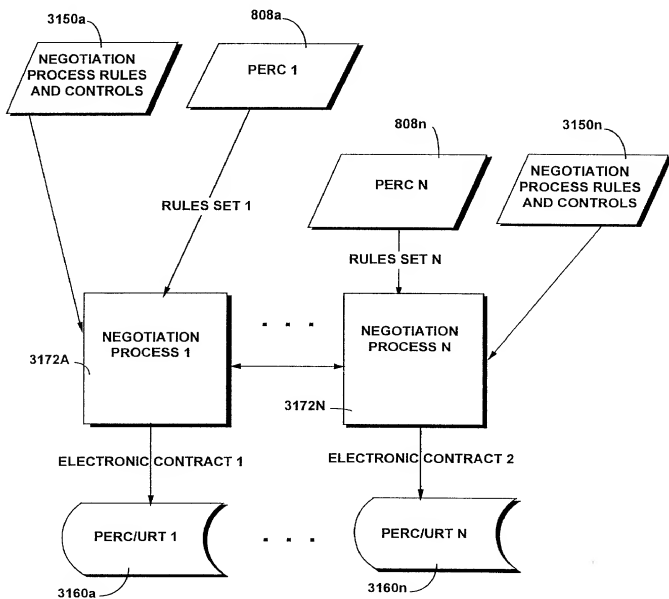
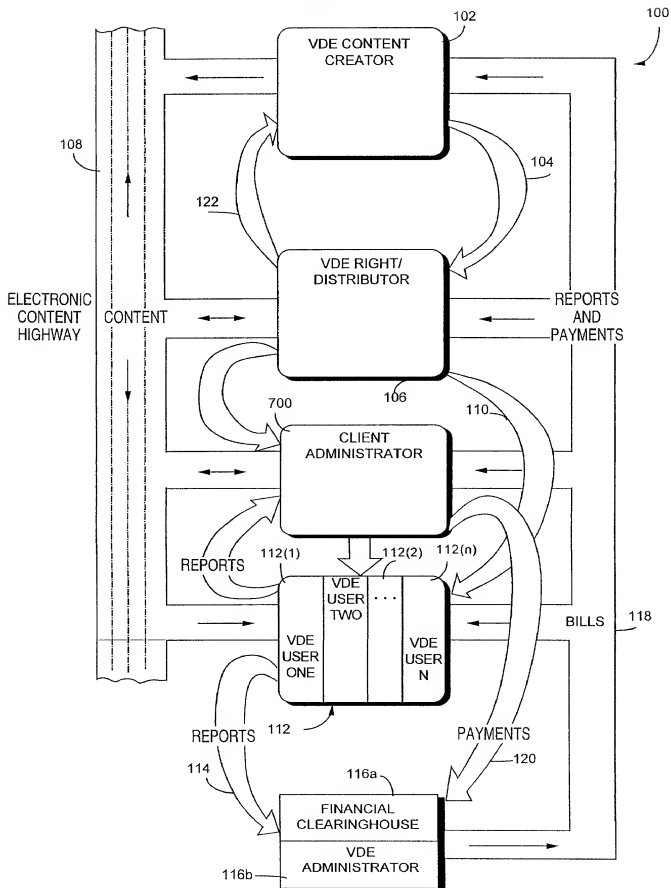


FIG. 77





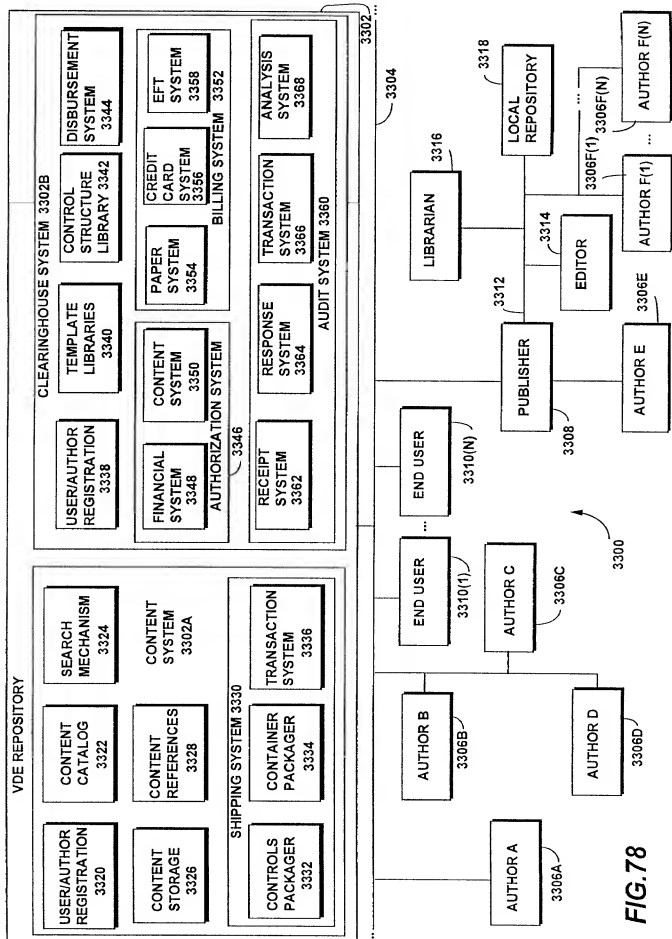
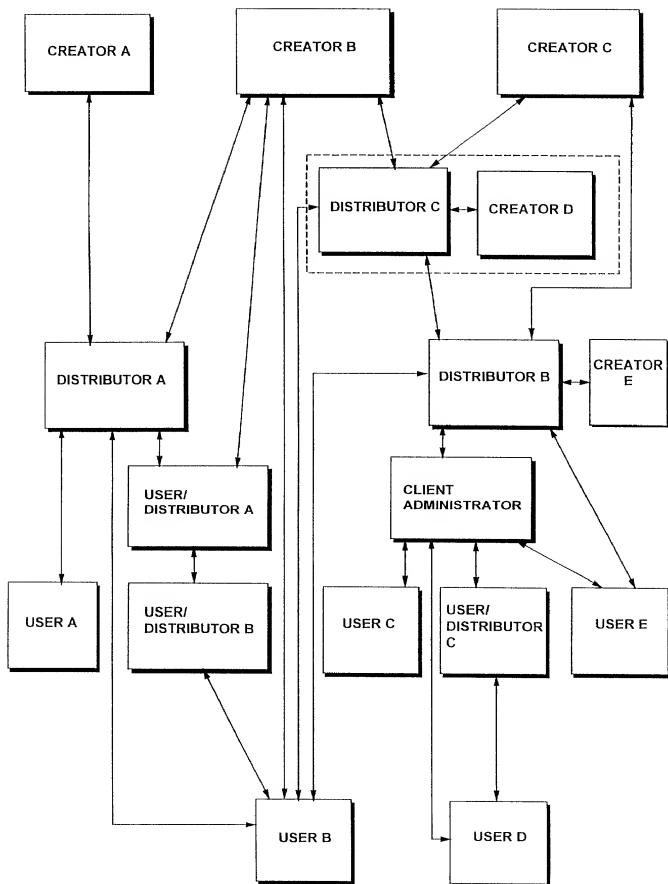
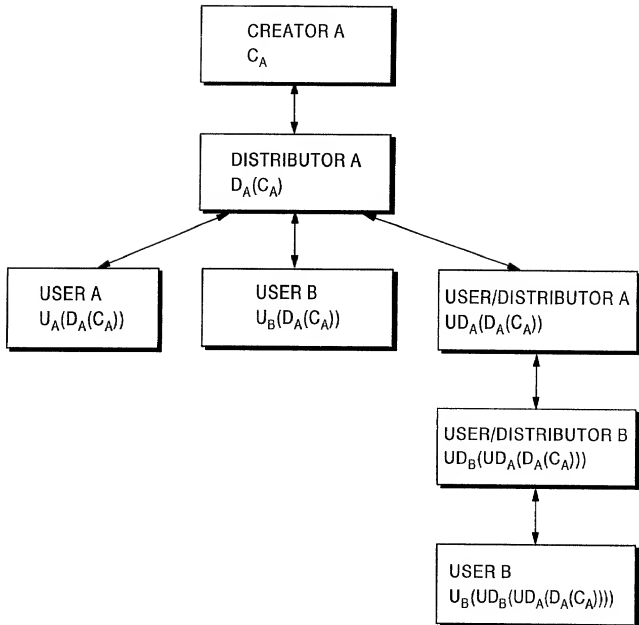


FIG. 78

**FIG. 79**

**FIG. 80**



69764370.072301





FIG. 83

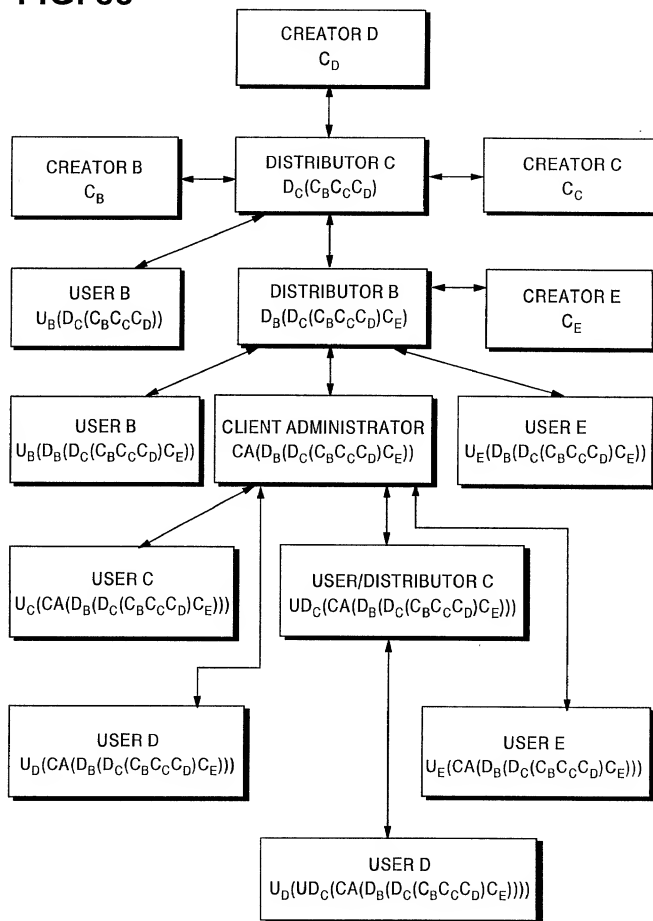


FIG. 84

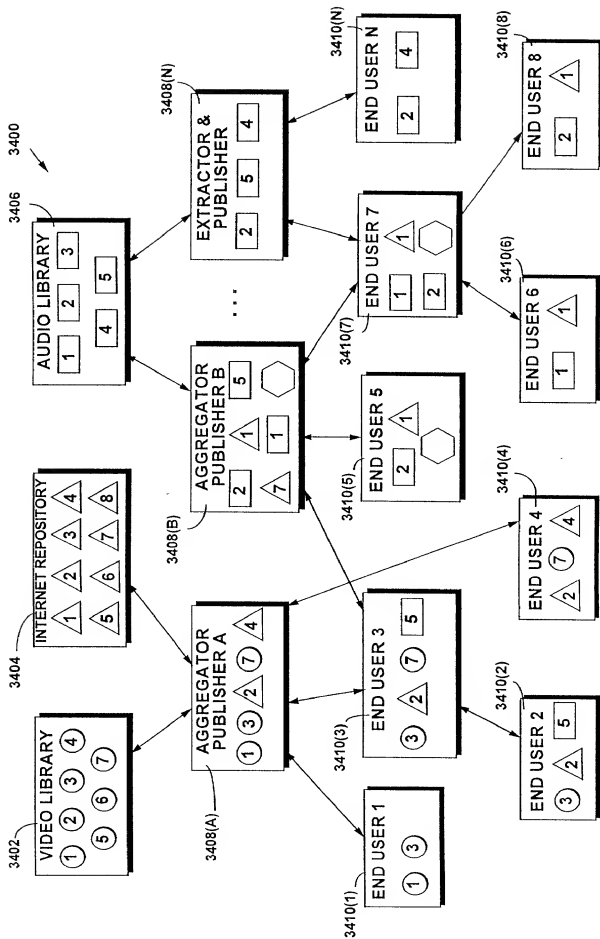






FIG. 86

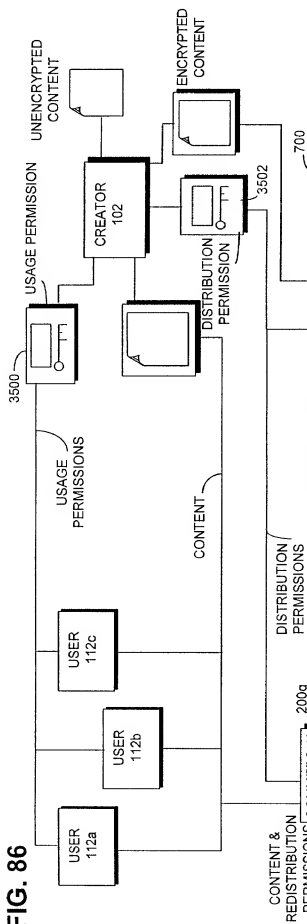


FIG. 86A

